Investigating the impact of participation in alternative education from a positive youth development perspective: A case study of the School for Student Leadership

Susan Elizabeth Joyce

B Ec (Monash), Dip Ed (University of Melbourne), M Ed (University of New England)

SUPERVISORS:

Assoc Prof Margaret Plunkett & Dr Cheryl Glowrey

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Statement of authorship and originality

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Signed:  Date…20 March, 2018……

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Abstract

The School for Student Leadership (SSL) has existed since 2001 as an alternative residential educational setting for Year 9 students in Victoria, Australia. It was designed in response to growing calls for more effective ways of engaging middle school students. A review of the literature illustrated a dearth of research regarding alternative programs and schools, particularly from a positive youth development (PYD) perspective, and relating to long term effects of participation. This study investigated student participants' perceived development in relation to the Five Cs - Confidence, Competence, Character, Connection and Care, concepts derived from the framework of PYD. It also examined differences in perceptions of students attending a shorter five-week program, compared to the standard nine-week program, as well as differences between male and female participants. This case study was undertaken utilising a mixed methods approach, using pre and post program surveys and interviews. Between 2013 and 2014, 385 students were surveyed and 58 interviews conducted over nine program offerings. The participants were then followed up one year post program, with 172 surveys returned and 14 interviews conducted. With the assistance of computer software programs, both the quantitative and qualitative data was analysed and then triangulated to form the findings. Participants' ratings for each of the Five Cs were higher at the end of the program, and effect sizes, though generally small, when combined with the qualitative data indicated the program as having a significant positive impact, although this diminished slightly one year post program. Little discernible difference was found between the five- and the nine-week programs, and only slight differences between the two genders. The set of recommendations that emanated from this research should be of assistance for both the SSL and other schools, particularly in relation to enhancing attributes such as the Five Cs.

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Abbreviations

AMOSE - Actuality Model of Student Engagement

AUSVELS – Australian Victorian Essential Learning Standards

ANOVA – Analysis of Variance

ASC – Alpine School Campus

CLP – Community Learning Project

DEARR – Drop Everything and Read and Reflect

DE&T – Department of Education and Training

DEECD – Department of Enterprise, Education and Child Development

Expo – Expedition – multi day trip

Five C's – Competence, Confidence, Caring, Character, Connection

ICT – Information Communications and Technology

IT – Information Technology

LEQ – Life Effectiveness Questionnaire

LT – Learning Technology

MYPRAD – Middle Years Pedagogy Research and Development

PGE – Post group euphoria

PYD – Positive youth development

SRC – Snowy River Campus

SSL – School for Student Leadership

VAEAI – Victorian Aboriginal Education Association Inc.

VCE – Victorian Certificate of Education

Chapter One: Introduction

This chapter provides a context for the study, outlining the history and setting of the School for Student Leadership (SSL). An explanation of my personal interest and background with the SSL is provided in a narrative form to help situate my personal motivation for undertaking this study. A description of the school's program, purpose and vision are also covered in this chapter. In addition to explaining the school setting, the aims and significance of this research are highlighted. This introduction aims to serve as a frame of reference for this study by providing the reader with an understanding of the context and reasons for undertaking this research.

Background of the School for Student Leadership (SSL)

The SSL began in 2000 as a single campus school called the Alpine School, which was situated in Dinner Plain in the Alpine region of Victoria, Australia. Due to its popularity, it opened a second campus in 2007 - the Snowy River campus in Marlo, Gippsland, and a third campus in 2009 – the Gnurad Gundidj campus in Glenormiston, South West Victoria. The distance between the three campuses is large, with more than 580km or 6.5 hours of driving separating the Alpine and Gnurad Gundidj campuses. Each campus has been chosen for its unique location and opportunities (School for Student Leadership, 2010a). For each of the four school terms, 45 Year 9 students from Victorian government secondary schools attend each of the campuses. Individual schools apply for places at the SSL and when accepted are invited to send up to six students. The schools are responsible for student selection, but it is suggested they send students with potential for leadership. The students usually attend the SSL for nine weeks and undertake a non-traditional curriculum focussed around personal development, leadership and team work. During the period in which the current research was conducted, students undertook a range of classes, which focussed on the following domains: Working in Teams, Building Social Relationships, Managing Individual Learning, The Individual Learner and a school specific class on Leadership (SSL, 2010-2012). Although the curriculum differed from what was on offer to Year 9 students in mainstream secondary schools, the domains that were covered remained compliant with the Victorian standard curriculum, which for that period was AusVELS (VCAA, 2017).

Personal Background for the Research

My first exposure to the SSL was in 2006 when I sent a group of students from the secondary college where I was working to the SSL for a 'Hothouse' program, a two-week program offered to local students. As liaison teacher, I was invited to see the progress of my students and to observe the program at work over a day. My experience in selecting participants to attend the SSL program had been difficult as there were so many great applicants. In the end, I selected a group of overall high achieving students, with the exception of two boys, who were potentially on the cusp of losing their way. These two boys seemed to exert a significant influence over their peer group and were genuinely friendly, but displayed little interest in schooling. As such they sometimes caused their teachers grief. I felt that the program offered by the SSL might be the nudge needed to set them back on a more productive path.

I will never forget visiting the school and listening to a metaphor one of these boys, who I will call Jack, had written about his time there. He likened his time at the Alpine campus of the SSL to a tree growing from a seed and becoming strong and sturdy. He relayed his new understanding of his learning style, confidence in making friends, talking to adults and becoming more open and independent. This seemed like a very different student to the one I had sent off two weeks earlier.

When Jack returned to his home school he put in much more effort. I noted that he sat away from his friends in class, and often spoke to me after class. He started riding bikes more and socialised well with all in his class. There were far fewer incidents of him being removed from class. He went on to complete Year 12 (he did VCE over three years so he could achieve a better score) and obtained an apprenticeship in his local town. The positive change in his outlook on life in general, but particularly towards school, made an impression on me, and it became something in which I took a real interest.

Nonetheless, it is difficult to ascertain how much the Alpine School experience influenced this student. Would he have achieved the same outcomes had he not attended? Can a two-week program really do anything to change student outcomes? From a teacher observer viewpoint, I certainly saw this student come back with a new enthusiasm for education. The change was not as noticeable in some of the others who were already performing at a high standard and had high self-efficacy. The other student I had sent in an effort to turn things around, did not respond to the same extent, but was certainly more positive in general.

I was always a little disappointed that my students had not had the opportunity to attend a nine-week full term program at the Alpine School. Would I have seen even greater change in Jack after nine weeks? Would the others have been challenged more and returned as even stronger and more independent leaders? Although my school applied the following year for a place in the program, we were not accepted as competition for places in the Alpine School was strong.

As my circumstances changed, I was successful in gaining a teaching position with the SSL at the Alpine campus. Working at the school over a number of years, I saw anecdotal evidence of the positive effect that the program had on the students who attended. I watched students develop to become more confident and efficacious, with greater understandings of how to cultivate and demonstrate leadership skills. I worked with a professional team of staff who were experts in Year 9 education, and participated in developing and updating the curriculum used at the school. The feedback from past students frequently focussed on how valuable the experience had been for them, and where it had led them in their lives.

In 2013, due to uneven term lengths and significant local bushfires, an opportunity arose to run a number of five-week programs. This led me to reflect back on how much my students had received from participating in only a two-week program years ago and how disappointed my students in following years had been on missing out on a place. If five-week programs were to run over a year at each campus, potentially eight programs instead of four could be offered with double the number of students being able to attend each year. However, would a five-week program be perceived as positively by students? Would a five-week program be considered worthwhile? What kind of impact could this type of alternate, fully residential schooling have on students in five weeks compared with nine weeks? These questions led to my research.

Personal Involvement with the SSL

During the period of the research, I was involved at the Alpine School campus as curriculum co-ordinator, so did have some involvement with students at that campus, although never as their direct liaison teacher. The other five cohorts who participated in the study were at a different campus, so I had no direct involvement with them except during interviews. It was important to acknowledge from the outset that being an insider researcher could have produced certain limitations for the current study (Barbour, 2008; Greene, 2014). However, a number of steps were taken to ensure that some of the issues of insider research,

such as potential bias, or being too subjective, and issues with confidentiality were addressed. The independence of the study and confidentiality were always emphasised with the student participants. Students understood that their participation in the research was in no way linked to their performance reports at the SSL. Likewise, by using mixed methods and a process of triangulation of the data, credibility of the current study was enhanced (Greene, 2014; Lincoln & Guba, 2000). Actions such as peer debriefing and review further ensured that credibility of the current study was maintained. There are also advantages to inside research, such as an understanding and knowledge of the research environment, which would be more difficult for an outsider to attain, as well increased access to participants (Greene, 2014). In the case of the current study, being a staff member at the SSL enabled ready access to participants who were able to speak of the program in great detail in the interviews, without having to explain aspects with which an outsider researcher may not have been familiar.

Research Aims

After examining the literature, I found that little research existed about the impact of programs, such as that offered by the SSL, on the development of adolescents in relation to positive youth development (PYD). Whilst there was a small body of research around the SSL program and similar residential education programs, it mainly involved investigations into the effectiveness of the programs and student outcomes. There was a dearth of research relating to the long-term impact of these programs, particularly in relation to PYD. A similar shortage of research existed in relation to program length or outcomes for males compared with females. This represented a significant gap in the literature and underpinned the development of the research aims and questions for the current study.

In conjunction with determining the research aims, there was a need to develop a framework for the research. The theoretical lens through which this research into the SSL was investigated was that of PYD (Lerner et al., 2011). This theory was derived from positive psychology and applied developmental science (Larsen, 2000). The Five Cs model of PYD, which investigated the five constructs of Character, Confidence, Caring, Competence and Connection, provided a suitable theoretical framework to examine the impact of the program for students at the SSL. These constructs were part of a positive psychology framework (Lerner et al., 2005), which could be described as fitting within a constructivist paradigm (Creswell, 2014; Johnson & Onwuegbuzie, 2004). As the research questions emerged, it became apparent that a mixed methods approach would be an effective

one for gathering and analysing data to answer those questions (Johnson & Onwuegbuzie, 2004; Mackenzie & Knipe, 2006; Tashakkori & Teddlie, 2003). The concepts were studied on a longitudinal basis through a series of pre-and post-experience surveys and interviews, using the SSL as a single case study (Stake, 2005; Yin, 2014). A longitudinal case study is a study of one research entity at multiple time points (Miles & Taylor, 2010), in this case at the beginning and completion of the program and one year post program. Analysis of this data provided a greater understanding of the perceived impact of alternative education programs on the development of adolescents, with reference to PYD.

The aim of this research study was to examine in detail the perceived impact of an alternative residential Year 9 education program on PYD. In particular, the outcomes related to the positive developmental traits of Competence, Confidence, Connection, Character and Care (Lerner et al., 2011), both at the conclusion of the program and one year post program participation. The research also determined whether there were any differences in perceptions of these outcomes related to program length or gender of participants.

Significance of the Research

As mentioned previously, the literature review identified a notable gap in relation to research examining programs such as that offered at the SSL and the effectiveness of such programs. In particular, there was a lack of research that specifically investigated the effectiveness of such programs using a positive psychology framework or of different time frames for running programs outside the mainstream school environment. Gender differences related to involvement in programs such as that offered at the SSL had also not been investigated to any great extent. As such, the research undertaken in the current study was valuable in that it used a positive psychology framework (Lerner et al., 2005) to examine perceived outcomes for participants in the SSL program in relation to their development of Competence, Confidence, Care, Connection and Character. These concepts have been identified as necessary components for positive overall youth development (Lerner et al., 2005), which has been associated with greater contribution to society later in life (Lerner et al., 2011). However, there has been little research outside the United States looking at PYD (Conway, Heary & Hogan, 2015; Holsen, Geldhof, Larsen & Aardal, 2016) and there is a need to examine the measurement and effectiveness of PYD in diverse settings (Conway et al., 2015; Holsen et al., 2016). The current study expanded the development of the field of PYD into an Australian setting for the first time. In addition, the current study examined not only the effect of the SSL program at its conclusion, but the effect one year

post program participation. This longitudinal aspect of the research was very significant as it allowed for examination of the carry over effects of the SSL program. Findings from the longitudinal aspect of the study would be of interest to a number of programs for adolescents, which constantly seek to ensure that gains from programs remain in the long term.

No research had been conducted about the SSL into optimal program length; however, the school had begun running programs of differing lengths. This current research has thus begun the process of determining what length provides for optimal student outcomes, as perceived by the student participants. By concluding that there was no significant difference in PYD between the nine-week and the five-week programs, the way for a possible examination of program delivery as well as the opportunity for the program to be expanded to include more participants by running shorter programs, has been paved. The results in relation to some gender differences also provide useful guidance for the tailoring of future programs to cater for the differing needs of boys and girls.

The insights gained from the research into the SSL in the current study are also valuable for providers of alternative education programs, whether based in outdoor education or otherwise. Although there are no programs exactly the same as that of the SSL, there are many educational institutions in Australia delivering alternative programs to Year 9 students (DEECD, 2012), as well as international programs. Given that the middle years has been noted to be a very significant time for youth development both in Australia and internationally (Bahr & Pendergast, 2007; Pendergast, 2010; Prosser, 2008), research into best practice program delivery is crucial. Whilst a huge array of anecdotal evidence exists about the value of attending the SSL (Dyson & Plunkett, 2018), it is important to have empirical evidence as well. The current study provided the opportunity to examine whether the program offered by the SSL is perceived by adolescents to have a positive impact on their development as lasting beyond the program. Similarly, the lack of definitive research into the optimal length of outdoor education programs is important to address, even at a case study level, due to the positive correlation between program length and outcomes identified in previous research (Cason & Gillis, 2004; Hattie, Marsh, Neill & Richards, 1997; Neill, 2008a). Results from the current study provide more information into the effect of program length on outcomes. This research can also provide guidance to both Australian and international alternative education programs regarding the way they structure their curriculum for middle years students.

Strengths and weaknesses in the SSL program were also highlighted through the current study, particularly in relation to the perception of positive development declining over time following the conclusion of the program. There was also uneven development of the constructs examined within the Five Cs model of PYD, which may impact on overall positive development. Overall, these results will provide guidance and assist the SSL in further improving and strengthening the program offered to its future Year 9 participants.

A list of recommendations developed from this research is provided in Chapter Eight. Whilst the current study used a case study approach to examine the SSL program, the recommendations that emerged are valuable for both the SSL and other alternative education programs. The current study provides significant guidance to the SSL for the future of its program, including examining aspects such as the reintegration process, how the genders are catered for within the curriculum and the length of program offered. Furthermore, the findings and discussion offer important insights into best practice for programs which cater to adolescents both in Australia and internationally, particularly with a focus on PYD.

Context for the study

The following section outlines the context for the study, covering the development of the SSL. The school's aims and the program are established and a comparison of the five-week and the nine-week programs is also presented.

History and Purpose of the Alpine School

In order to understand the purpose, and hence measure any impact of the program at the SSL, it is important to have an understanding of the background and development of the school since its inception.

The initial campus of the SSL, known as the Alpine School, commenced operation in 2000 at Dinner Plain, a remote location in the mountains in Victoria, Australia. It developed in response to an identified need for an engaging program for Year 9 students, which was recognised in the Victorian State Education system (Margetts, 2010, Reeves, Dyson & Plunkett, 2018). With the growing recognition and focus on the needs of Year 9 students, a plan for the Alpine School was developed to cater for government school students in a way that had only been possible in elite private schools in the past[1]. Although it was recognised

[1]Some of these programs included Geelong Grammar's Timbertop, Lauriston Girls College's Howqua, and Methodist Ladies' College's Marshmead.

that the Alpine School would only cater for a small number of students, it was seen as a step in the right direction.

The curriculum used in the Alpine School was developed for middle school students (Longmire, 2010; Reeves, Dyson & Plunkett, 2018), with a particular focus on the development of enterprise and leadership. The nine-week program was originally designed for 40 students from eight schools across the state. The program focussed on personal development and outdoor experiences, including expeditions. Students also worked on a Community Learning Project (CLP), designed by students prior to their commencement at the school to benefit their local community on their return (SSL, 2010-2012; SSL 2010a).

The school chose to focus on enterprise education as it was seen to foster the needs of middle school students. Enterprise education was a focus of the Ministerial Council on Education, Employment, Training and Youth Affairs (MCEETYA, 2000) and particularly fitted their strategy for vocational education. The notion of enterprise education was outlined on the Alpine School's first web site (Alpine School, 2002) and by MCEETYA (2000),

> as a set of qualities and competencies that enable individuals, organisations, communities, societies and cultures to be flexible, creative and adaptable in the face of change. It was based on the belief that enterprise involves using the imagination, being creative, taking responsibilities, identifying ideas, organising for action, making decisions, managing, dealing and communicating with others, assessing performance and the like in a wide range of living and working contexts. Enterprise education was seen as being able to give students the skills such as initiative, problem solving, creativity, adaptability and flexibility and translate them into practical action. (p. 21)

Leadership was also a core focus of the program, with much of the curriculum designed around teamwork and community building (Margetts, 2010). The Principal, Mark Reeves, also saw a moral purpose in the program, and insisted on the provision of a 'rite of passage' (Reeves, 2018). It was felt that the challenging physical expeditions and the residential experience, which focussed on community building, could assist with that rite of passage. The school was expected to be at the forefront of Year 9 education, using experiential learning to cater for the needs of attending students. Reflection, recreation,

reinvigoration and recovery were also identified as vital components of the program. A 'significant other' in the shape of one or more adults on site provided mentoring and role modelling for students. Students would also be encouraged to experience the outdoors and connect with nature, rather than digital media, which was so common amongst Gen Y adolescents (Reeves, cited in Longmire, 2010).

While the Alpine School program involved many outdoor education activities, it was to be clearly distinguished from many other programs which were solely outdoor education based. As noted by Don Tyer, who was a member of the initial taskforce that brought the school into existence,

> The outdoor education component at the Alpine School was never about outdoor skills. There wasn't that dichotomy that people might say the Alpine School is just about outdoor education. But it wasn't ever simply about outdoor education in my mind, and I hope not in the central Curriculum Branch's mind either. That was not our mind-set for the Alpine School. Our mindset was about integrated learning. We were well aware of the benefits of that integrated learning. (cited in Longmire, 2010, p. 18)

The staff of the school continually worked on developing curriculum and core values for the school, and, in 2007, the following list of values were agreed upon by staff *(*SSL Annual Report, 2007):

- Diversity and inclusiveness;
- Experiential learning, creativity, challenge and fun;
- A holistic approach to health and wellbeing;
- Respect for self and others;
- Living sustainably;
- Fairness, equity and community;
- Opportunities for growth socially, intellectually and personally;
- Exercising rights, accepting responsibilities; and
- Accepting accountability. (p. 5)

The process of staff consultation was repeated in 2012 with a vision and mission statement being developed by all staff (SSL, 2010-2012), with many of the original values remaining in the statements:

> **Our Vision**: A community where people are passionate, informed and active global citizens.
>
> **Our Mission**: We are a Year 9 residential school for Victorian government students which provides opportunities for personal, community and leadership development. (SSL, 2010-2012, para. 4)

Mark Reeves was the first principal of the SSL and remains as current principal today. He often refers to the program as a rite of passage (SSL, 2010a, Reeves, 2018), a term viewed by many cultures around the world as denoting a transformational experience for an adolescent (Weisfeld, 1997). In our modern Western culture this rite of passage has in many ways been lost, leaving young adults with a gap in their transition to adulthood and maturity (Santrock, 2002). For many, rites of passage include rituals such as obtaining a driver's licence, the right to vote and to legally consume alcohol. In Australia, these rites of passage occur in the late teenage years, while younger Australian adolescents do not have access to their own rite of passage (Corowa et al., 2008, Santrock, 2002). Indeed, in our own Australian Indigenous culture, ceremony forms part of a rite of passage and takes place in the early adolescent years (Corowa et al., 2008).

School data collected by the Victorian Department of Education every year has shown that the SSL regularly outperforms 'like schools', which are schools whose student populations are similar to that of the SSL in socio-economic status and language background (SSL Annual Reports, 2001-2012). Students at the SSL are engaged and motivated to learn. On examination of this data alone, it can be seen how effective the program is at engaging middle years students. In 2004, students attending the Alpine School completed a "Feelings about Yourself and School" survey from the Victorian Department of Education. This measured student feelings of connectedness to peers, teachers and school, safety, self-esteem and motivation to learn. The results were described in the 2004 SSL Annual Report, with the SSL results significantly higher than benchmarks (SSL, 2004). In the Victorian Education Department's "Students' Attitudes to School" survey, the Alpine School and later the entire SSL was consistently above the 90th percentile, as shown in all school's annual reports. These surveys are better to compare between years, rather than between 'like' schools, as

due to the uniqueness of the Alpine School, there really are no true 'like' schools in the government sector with which to compare.

There is existing research on both the Alpine School and its successor, the SSL, which will be discussed in detail in the next chapter. This research has consistently demonstrated the effectiveness of the SSL program on perceived student outcomes (Dyson & Plunkett, 2018). With the demonstrated success of the program came an extension of two new campuses in 2007 and 2009 at Marlo and Glenormiston respectively. This also led to a change of name for the school from the Alpine School to the School for Student Leadership. Lynne Kosky, a former Victorian Minister for Education, noted the continual lobbying to expand the number of campuses, and to examine different types of potential program offerings, including gender specific, international student programs and programs of varied length (cited in Longmire, 2010). In 2014, a group of students completed part of their program at Utahloy College in China, a program variation that has continued ever since.

The SSL could be considered a flagship for state school education and more specifically, middle years education. Since its inception, thousands of Year 9 students have participated in the programs, and the school has consistently achieved very high satisfaction rankings on Victorian Department of Education surveys. Young (2013), reported in the Sydney Morning Herald that

> the success of the school has been well documented and a visit to its website shows many students describing it as life-changing. "Students who've been through our experience do better at school and they're better at understanding their place in the world and what they want to do to contribute to the world, which are fantastic outcomes," Mr Reeves says. (para. 24)

However, there is a genuine need for explicit research into the effectiveness of the program, rather than just anecdotal evidence about the success of the school. Whilst some research does exist, there is very little research examining the long-term impact of the SSL program on participants in great detail. Likewise, there is no research looking at gender specific outcomes for program participants, nor the effect of different program lengths.

School for Student Leadership Program

In order to contextualise the study, the following section provides an outline of the structure of the SSL and the nature of the programming, including admission into the

program, program routines, curriculum and staffing. It is derived from information collected from published and unpublished works, such as the school website, video and school curriculum documentation, and from my four years of personal experience at the school as a teacher and curriculum coordinator.

The SSL program is offered to state or government school Year 9 students across Victoria. Schools initially apply for places in the program and are chosen by the Principal and leadership team and allocated across the various education regions of Victoria. Each program aims to have a mix of students from country and city schools. This selection process usually takes place in the year prior to participation in the program. Schools are generally offered places for six students, three boys and three girls (SSL, 2010b).

The chosen schools then use their own processes to select students to attend the program. Guidelines from the SSL for selection include choosing students who want to attend the program and have displayed potential for leadership (SSL, 2010b). There is also a strong push to include Indigenous students, who are referred to by the term Koorie in most parts of Victoria, through the Koorie Academy of Excellence, (Wannik, 2010; VAEAI, 2012). Over the years, the SSL has developed a long-standing association with the Koori Academy for Excellence, which has resulted in an increasing number of Koori students attending the program.

Once students have been selected, they begin working on a Community Learning Project (CLP) (SSL, 2010b). How much time and effort the students put into developing their project at this stage largely depends on the motivation and time constraints of the liaison teachers at the students' home schools. Some students arrive at the SSL having already started on their CLP, whilst others have not yet decided upon a topic.

The program is generally nine weeks in duration. During this time, students are issued with personal laptops and have email access to family and friends. However, there is no access to social media such as Facebook, You Tube or Twitter. They also do not have access to mobile phones and no personal phone calls or calls to home are permitted. This can be a challenge for many Year 9 students.

The students are grouped with others from their school and one other school, usually a rural and city school together. These groups, known as Expo groups, consist of 12 students on average (SSL, 2010b). Some classes are undertaken with just the 12 students, but at other times the groups are combined. The Expo groups participate together in all the activities and also are rostered on together for duties.

Students share a room with one other student, not from their home school. They are expected to assist with duties, such as serving meals, washing dishes and cleaning the bathrooms, plus taking care of their rooms and their washing. Each day two students are allocated as 'student leaders' and they attend a morning meeting, set goals and conduct a number of headcounts and announcements throughout the day (SSL, 2010a). The aim is to give students as much responsibility as possible.

The regular timetable is as follows:

- 7:00am Breakfast
- 7:30 Morning Headcount
- 9:00-12:00 Morning class (including 30 min recess)
- 12:30 Lunch
- 1:30-3:30 Afternoon class
- 5:00 DEARR (Drop Everything And Reflect and Read) – 30 min. silent time
- 6:00 Dinner
- 7:30-8:30 Evening class
- 9:30 Lights out

The following activities, as described in the SSL's curriculum documentation (SSL, 2014) underpinned the student experience at the SSL during the time the current research was undertaken:

Peer Skills – lessons focussing on conflict resolution, resilience and ways to approach problems with peers, including how to access KidsHelpLine.

Thinking and Learning – lessons focussing on Hermann Brain Dominance Index profiling (Herrmann, 1996), learning within teams, introduction to Visual, Auditory, Kinaesthetic and Reading profiling. Students are given the opportunity to discover their preferred learning and thinking preferences and then examine how to best use this knowledge. Students come to an understanding of the great variety in peoples' thinking and learning styles.

Enviro – a series of lessons focussing on the environment, whereby students undertake a range of outdoor activities to observe nature. Other lessons focus on sustainability and the impact of humans on the global environment

Bridge Building – a team building activity undertaken at the start of the program. Students work together to construct a bridge using wooden poles and ropes.

Teams Day – one of the first team activities - a range of initiative activities undertaken as a team

Expo – multi day expedition of hiking, canoeing or skiing

Expo Skills – learning the skills required for the Expeditions, such as trangia cooking and setting up a tent

Intro Lessons (MTB, Bush, Skiing) – introduction to the skills needed for outdoor activities

Outdoor Experiences – ranging from mountain biking, bushwalking, orienteering, rafting, caving, canoeing and skiing

Presentation Skills – learning and practising public speaking skills

Guest Speakers – a range of motivational guest speakers attend each term

Movies – students watch a range of movies, predominately documentaries about people achieving goals

CLP – Community Learning Project – students work on a project to benefit their community to be completed on their return home

Passport – students present a written scrapbook of their learnings and time at the SSL. These writings are structured in sections for each of the classes.

Beliefs and Values – students examine their own beliefs and values and look at the diversity of others' beliefs and values.

*Leadership Conferenc*e – students define leadership and examine different leadership styles. They evaluate their own leadership style and create a metaphor for leadership.

Indigenous Perspectives – students are introduced to the Indigenous history of the area, often by an Indigenous speaker.

Approximately once per week students also have a 'rest' day, where they are given the opportunity to plan and run their own activities of interest, which may include a day hike, a local radio broadcast, sports, crafts, music or just some 'down time'.

The students are taught using an experiential approach, with teachers facilitating many of the activities, while often taking a 'back seat' to let students work out solutions and their own learning. This is most evident on the expeditions students undertake. These are overnight trips with an outdoor component such as hiking, skiing, canoeing or bike riding. Students are assigned roles and are in charge of everything including navigation, team organisation, catering, campsite set up, hygiene and timekeeping. Staff only give directions when safety is an issue (SSL, 2010b).

The Five-Week program

During 2013, circumstances led to the introduction of a number of five-week programs, rather than the traditional nine-week programs. Due to the timing of the Easter break, the second term of the year ended up being 12 weeks long, which created the opportunity to run two five-week programs at all three campuses. This was delivered in Term 2, 2013 at all campuses. Earlier that year, a large out of control bushfire in the vicinity of the Alpine Campus meant that the school was closed for the first term due to fire risk. In order to include the students who had missed out due to the fires, two shorter programs were conducted in Term 4 in 2013 at the Alpine Campus.

The five-week programs largely consisted of a condensed nine-week program. According to the school's curriculum committee, many of the lessons were shortened or combined with other lessons. Whilst not as long a program, the same final student report was utilised and students completed similar projects (personal communication, 23 February, 2013). Copies of the Timetables for both a nine-week and a five-week program at the Alpine campus are included as Appendix 1.

Table 1.1 displays the difference in curriculum offerings in the five-week and the nine-week programs for the Alpine campus.

Table 1.1

The Five-Week and Nine-Week Curriculum.

Class	Number of classes in the five-week program	Number of classes in the nine-week program
Expedition	8	10
Thinking and Learning	2	3
Peer Skills	1	3
Community Learning Project	8	8
Visiting Weekend	0	4
Local Learning Project	0	4
Rest Days	9	12
First Aid	1	3
Outdoor Activities	6	17
Passport	7	8
Individual Learning Plan	2	4

In the nine-week program, the first five weeks were generally used to introduce many of the skills and classes included more content than in the second half of the program. The final month of the program provided students with time to work on projects, including their CLP and Passport and for a three-day expedition. This was seen as a consolidation of the skills learned in the first half of the program (personal communication, March 2012). The two halves of the program were broken up by a visiting weekend, where parents or guardians spent a weekend with their student off campus.

In the five-week program many of the classes were condensed and there was no visiting weekend. In the Term 2 five-week programs students only undertook one expedition. However, in the Term 4 five-week program at the Alpine campus, students participated in two expeditions. This change took place due to a staff review at the completion of the Term 2 programs. In this review, staff highlighted the importance of the second expedition in consolidating student learnings (personal communication, June 2013). Students were still expected to plan a CLP and complete a Passport, although this was slightly modified for the shorter time frame.

This is the context for the current study, which took place over the period of 2013-2014 at two of the three school campuses. The Gnurad Gundidj campus was not included due to the very long distance between it and the Alpine School campus, which made data collection unfeasible. The next section outlines the structure of the thesis.

Outline of Thesis

This thesis examines the impact of the program at the SSL from a PYD perspective. The initial chapter includes an introduction providing information about the impetus for commencing the current study. It also outlines the formation of the SSL and the school's mission and aims. It provides details of the curriculum and the daily life at the school, as well as information on the administration of the program. Chapter Two provides a review of the literature, critiquing research that currently exists in relation to the SSL, adolescence and middle schooling and associated programming, outdoor education and PYD. It is from this chapter that gaps in the literature were identified and the research foci emerged. Chapter Three details the methodology, the research design and the methods used to conduct the current study. It identifies the constructivist paradigm underpinning the approach to the study design, and the applied developmental science of PYD as the theoretical framework. The mixed methods research design is explained, including the instruments used, which involved pre and post surveys and interviews. The analysis of the quantitative data and the

associated findings in relation to each of the research questions are presented in Chapter Four, while Chapter Five includes the qualitative data analysis and findings. Chapter Six presents the triangulation of both the qualitative and quantitative findings. Chapter Seven provides a discussion of the overall findings in relation to each of the research questions. The final chapter, Chapter Eight, outlines implications for the program at the SSL and other similar programs in light of the findings. This chapter also details the limitations of the current study, and possible avenues and direction for future research. It also presents a set of recommendations to provide guidance for the SSL in particular, but also for any schools seeking to positively develop attributes in their students such as the Five Cs of Connection, Confidence, Character, Competence and Care.

Chapter One Summary

This chapter provided an overview of the context and basis for the current study, in addition to outlining the aims and significance of this research. It explained my personal connection with the study site – the SSL and how this provided an impetus for this research project. The chapter also provided a summary of the background and aims of the SSL, and a detailed overview of the program offered at the school, including the curriculum differences for the five-week and nine-week programs. The following chapter provides a review of the literature that was deemed relevant to the context of the study, highlighting the gaps which underpinned the development of the research questions for this study.

Chapter Two: Review of the Literature

This chapter presents a discussion of the extant body of literature relating to educating adolescents in non-traditional educational settings. The chapter begins with an outline and discussion of literature on adolescence and adolescent development, to frame an understanding of the school's students. It then moves onto schooling aspects including middle years schooling, Year 9 programs, outdoor education programs, residential schooling and gender outcomes associated with this area of alternative schooling and outdoor education. This is followed by a discussion and critique of existing research into the perceived benefits of the SSL, undertaken as part of a school/university partnership. This research, which began in 2001, the year after the school first opened, provided a valuable background for this current study. Research into positive youth development (PYD), particularly in relation to youth programs (Lerner et al., 2011), is also explored in order to provide a possible conceptual framework for examining the SSL program outcomes. A particular US study, the 4-H PYD study (Lerner et al., 2011) was examined as an exemplar for determining perceived outcomes of programs from a PYD perspective. Each area was explored where appropriate from both an Australian and an international perspective. These bodies of literature underpin the nature and context of the current study and situate this research within an existing body of knowledge, albeit with a number of identifiable gaps particularly evident.

Adolescence

As this study focussed on the participation in an alternative education program for adolescents, it was important to review the existing research on adolescents, their needs and programs which cater for them. Initially, literature defining adolescence and adolescent development was reviewed. Adolescence and its definition has changed over time (Bahr & Pendergast, 2007; Eccles & Gootman, 2002) and through undertaking a review of the literature, the use of the term adolescence for this research was determined. Research into the learning and social needs of adolescents was also examined (Bahr & Pendergast, 2007; Carnegie Council, 1995). Literature relating to adolescent gender differences and the associated impact on educational outcomes was also critiqued (Davison & Frank, 2006; House of Representatives, 2002; Perry & Pauletti, 2011). There is little current research into adolescence from a positive developmental perspective, particularly in relation to the Australian context (Lerner et al., 2011; Roth & Brooks-Gunn, 2000).

Definition of Adolescence. Bahr and Pendergast (2007), leaders in adolescent education research in Australia, stated that the term adolescence generally refers to the time between childhood and adulthood. However, this definition raises questions of when adulthood is reached. Bahr and Pendergast (2007) noted this question and outlined a history of the changing nature of adolescence in the Western World throughout the last century. They explained that at the turn of the 19th century, the journey to adulthood was not as prolonged as it is now, with children more likely to be working than at school when puberty hits (Bahr & Pendergast, 2007). It has only been in the last century with the advent of compulsory schooling and child labour laws that adolescence has begun to be recognised as its own period and subsequently studied in detail (Bahr & Pendergast, 2007; Carr-Gregg & Robinson, 2017; Eccles & Gootman, 2002). Indeed, in the last few decades, it has been argued that adolescence begins in the early teens and continues into one's twenties (Bahr & Pendergast, 2007; Carr-Gregg & Robinson, 2017; Cohen et al., 2016). Adulthood can experience delays based on societal factors, such as rising unemployment, increasing house prices, the need to continue with education and delayed age of marriage (Bahr & Perdergast, 2007; Carnegie Council, 2005; Catalano & Toumbourou, 2009; Eccles & Gootman, 2002).

The World Health Organisation (2016) defined adolescence as the period of growth from childhood to adulthood and put an age range of 10-19 for adolescence. However, the Royal Australasian College of Physicians (2008) defined an adolescent as between 12-18 years of age. Putting an age range on adolescence is fraught with difficulty as individuals and societies progress differently both physically and cognitively (Bahr & Pendergast, 2007; Cohen et al., 2016). Others have defined adolescence and developed theories about adolescents by examining physical and socio/cognitive characteristics of this stage of life (Bahr & Pendergast, 2007). Wright and Kutcher (2016) used alternative terminology for adolescence such as 'transitional-age youth' and 'emerging adult'.

Within the context of the SSL, all students who attend the programs are Year 9 students, aged mainly between 14 -16 years of age. Despite incongruence in defining a distinct age for adolescence (Bahr & Pendergast, 2007, Cohen et al., 2016; Wright & Kutcher, 2016) contemporary researchers would concur that 14-16 year olds fit within the definition of adolescence (Bahr & Pendergast, 2007).

Adolescent development theory. Bahr and Pendergast (2007) noted that there are largely two fields of developmental theory in adolescence – one that concentrates on adolescence being driven by the physical changes which occur and the other by the socio-

cognitive changes. Contemporary developmental theory tends to merge these concepts into a broader picture of adolescent development (Lerner & Castellino, 2002; Steinberg, 2005). Lerner and Castellino (2002) postulated that adolescent development is an amalgamation of biology through culture, the natural and designed ecology, and history. Steinberg's (2005) adolescent development theory used research on brain development and suggested that as brain, behavioural and cognitive development all occur at different paces, adolescence is a time of heightened vulnerability due to gaps between these developments. Wright and Kutcher (2016) examined the neurobiological development of the adolescent brain and the development of research around the prefrontal cortex development (Geidd, 2004). They noted that this is often not fully developed, particularly in males, until the early to mid-20s. There are many implications for research using contemporary science, which uses magnetic resonance imaging (MRIs), into brain development (Bahr & Pendergast, 2007; Geidd, 2004; Nagel, 2010). As this is a relatively young field of research, implications for researchers and educators are still emerging (Cole, Mahar &Vindurampulle, 2006b). As adolescent development theory continues to grow with advances in scientific knowledge, there is a need for more research linking these theories with contemporary psychological theories, such as PYD.

Needs of the adolescent. Adolescence has been identified as a period of significant change that can be difficult to navigate (Bahr & Pendergast, 2007; Carnegie Council, 2005). Not only are there huge biological changes with the onset of puberty, but there are also significant cognitive and emotional changes occurring (Eccles & Gootman, 2002). Peer groups become very important, and family is often a source of conflict (Rubin et al., 2008). Adolescents also develop the ability to think more laterally and in a more abstract manner (Eccles & Gootman, 2002; Nagel, 2010). Eccles and Gootman (2002) noted that "by middle adolescence, there are also growing needs for help with more intellectually challenging courses and support in dealing with identity issues, cultural heterogeneity, career planning, and romantic relationships" (p. 65).

Adolescents need to be challenged in their thinking to prevent academic boredom at school (Bellhouse, 2004). The prefrontal cortex – still developing in their brains – needs to be developed through challenging tasks and activities involving metacognition (Cole et al., 2006b). Risk taking and boundary testing are all features of this period of development (Bahr & Pendergast, 2007; Bellhouse, 2004; Carr-Gregg & Robinson, 2017).

Some individuals appear to sail through adolescence with very little challenge, while others struggle (Eccles & Gootman, 2002; Roth & Brooks-Gunn, 2000). Adolescence was traditionally viewed as a time of storm and stress (Arnett, 1999), with a focus by psychologists on treating delinquency arising from a deficit viewpoint (Carnegie Council, 2005; Eccles & Gootman, 2002). Recently, a different view of adolescence has emerged from the perspective of positive psychology (Lerner et al., 2011; Roth & Brooks-Gunn, 2000). This is a movement whereby positive traits and strengths of individuals are developed (Pajeres, 2009). With the advent of positive psychology, psychologists and educators have begun to look not at how to 'fix' adolescents, but rather on what the needs of adolescents are, and how best to meet those needs (Bissett, 2005; Cole, 2006). This has led to a variety of research and literature in education both nationally and internationally on how to cater appropriately for adolescents in the classroom (Arnett, 1999; Benson, 1997; Carnegie Council, 1995; Cole, 2006; Cole et al 2006b; Pendergast, 2010). It has also led to the development of programs such as those provided at the SSL, which focus on leadership development and the personal growth of the adolescent participant, rather than on fixing any negative behaviours (DEECD, 2006). It is from this perspective of positive personal development in adolescents that there is a need for contemporary research.

In order to assist in positive development of adolescents and cater for their needs, it is not enough to just aim to prevent negatives such as teen pregnancy delinquency, school absenteeism, unemployment, excessive consumption of alcohol, drug taking and promiscuity, but programs should also be designed to promote and foster positive development (Carnegie Report, 2005; Eccles & Gootman, 2002; Lerner, Fisher & Weinberg, 2000; Rich, 2003; Roth & Brooks-Gunn, 2000; Shek, Sun & Merrick, 2013). The program at the SSL, unlike other similar programs, does not target troubled or at risk youth, but rather targets students with potential for leadership (SSL, 2010a). The SSL has a mission of "providing opportunities for personal, community and leadership development" (SSL, 2010-2012, para. 4). Due to the SSL's focus, this literature review has not detailed the research on adolescents and harm minimisation nor delinquency prevention, at risk behaviours and rehabilitation. Rather it examined the literature relating to best practice for PYD.

Eccles and Gootman (2002) outlined features of positive developmental settings for adolescents. These included being physically and psychologically safe, setting limits and structures, positive social norms, belonging and supportive relationships, connecting with family and community and skill building opportunities. These features were similar to the

recommendations from the Carnegie Report (1995), a well-known USA report on working effectively with adolescents. This report recommended using small groupings, teaching an integrated curriculum, using cooperative learning, improving health and fitness and connecting families and communities.

As outlined above, there are numerous lists of recommendations to cater for adolescents in community and education programs (Bellhouse, 2004; Carnegie Report, 2005; DE&T, 2006; Eccles & Gootman, 2002; Roth & Brooks-Gunn, 2000). Common to most of these lists is the need to engage adolescents with their learning, connect with community and family, offer challenge and opportunities to learn, and to provide an appropriate and safe environment. Many school reforms have been implemented based on recommendations from these lists (Bahr & Pendergast, 2007; Pendergast, 2010; Prosser, 2008; Stobart & Stoll, 2005).

Reeve and Ainley (2004) suggested that engagement is highly dependent on students' interest in learning activities as well as confidence in their own abilities. They posited that students need to feel that a task is worthwhile and has value for them. Bellhouse (2004) likewise asserted that adolescents need to be interested in activities, see value attached to activities and focus on achievement. Adolescent students learn best when activities are based on their personal interests, and the use of senses such as touch and smell can increase engagement (Reeve & Ainley, 2004).

Roth and Brooks-Gunn (2000) outlined what adolescents need for positive development as the ABC of school:

> the importance of a developmentally APPROPRIATE environment for youth, particularly young adolescents; the influence of the BEHAVIOR of others in the school; and the powerful role of CONNECTION, to the institution of school as well as to teachers and other students. (p. 9)

Although all of the above suggestions for positive development were worded slightly differently, there appeared to be congruence amongst researchers that adolescents need connection with their environment, their institutions and the material with which they are engaging.

Gender differences in adolescence and education. A substantive body of literature exists in relation to developmental differences between males and females in adolescence (Davison & Frank, 2006; Perry & Pauletti, 2011). During adolescence, the sexes develop

quite differently in relation to behaviours and perspectives (Davison & Frank, 2006). Aside from the obvious physical differences, social and emotional development can also differ (Perry & Pauletti, 2011). Girls, in general, have lower self-esteem (Gentile et al., 2009; Kling, Hyde, Showers & Buswell, 1999) and are more susceptible to depression (Perry & Pauletti, 2011). They also see themselves as less competent at academics and maths, but are much more open and sociable than boys (Perry & Pauletti, 2011). Boys in turn have a stronger self-concept and are more aggressive (Perry & Pauletti, 2011). In Australia, in recent years, the data has shown that girls outperform boys across the board in literacy, and there is no statistically significant difference of performance in the middle years for genders in Australia in numeracy (Bahr & Pendergast, 2007; House of Representatives, 2002; Thomson, De Bortoli & Underwood, 2016). Importantly though, these performances are generalised and often stereotyped. Not all boys do less well academically and not all girls have lower self-esteem (Bahr & Pendergast, 2007; Mills, 1999). Other factors may contribute such as location, socio-economic status and cultural background (Bahr & Pendergast, 2007). Hyde (2005) analysed 124 meta-analyses and noted more similarities than differences in gender throughout childhood and adolescence. She found little statistically significant difference between the genders, and some of the differences were determined by context, rather than gender (Hyde, 2005). Hyde's study (2005) did seem to contradict many other studies, which clearly show differences between the genders in adolescence (Bahr & Pendergast, 2007, Mills, 1999, Lahelma, 2014).

Given the difference in gender performance academically and socially shown in many studies (Bahr & Pendergast, 2007; House of Representatives, 2002), it is important to examine education programs and how they cater for the different genders. Lahelma (2014) noted that historically there have been two real foci for researchers with regard to gender and education; equality of educational access for girls and gaps in academic achievement for boys. Lahelma (2014) was concerned that this looked at gender differences in education with too narrow a perspective. Indeed, much of the research did seem to focus on equality provisions for education and overall outcomes, rather than the specifics of different developmental and educational needs for the genders (Lahelma, 2014). Overholt and Ewert (2014) suggested that rather than look at gender differences, it is important to decide if gender really does play a role in outcomes of education programs. This would then give research the practical implication of guiding education with the best approaches to deal with gender difference.

In the past 30 years, there has been an increasing push in Australia to improve education for boys (Biddulph, 1997; House of Representative, 2002; Mills, 1999). It has been argued that the poor performance of boys in school has arisen due to feminism and the need for equality in education and an improvement in girls' education (Mills, Martino & Lingard, 2007). In 2002, the Australian Government released a report into boys' education, *Boys: Getting It Right* (House of Representatives, 2002). This report received bipartisan support. The report was associated with the following Terms of Reference:

> ● inquire into and report on the social, cultural and educational factors affecting the education of boys in Australian schools, particularly in relation to their literacy needs and socialisation skills in the early and middle years of schooling; and
>
> ● the strategies which schools have adopted to help address these factors, those strategies which have been successful and scope for their broader implementation or increased effectiveness. (House of Representatives Standing Committee on Education and Training, 2002, p. xi)

The recommendations from this report largely focussed on early intervention into literacy and numeracy for students; more teacher training focussing on specific gender differences and the needs of boys in education; more options in secondary schooling for vocational education; and support for parents in recognising the needs of boys (House of Representatives, 2002). Mills et al. (2007) were critical of these recommendations, stating that the focus was on the disadvantages of boys in the education system, rather than on examining the issues creating difficulties for some boys. They argued that some of the recommendations would return education in Australia to the patriarchal dominated field it once was.

Recently, research into brain development has found significant differences in the development of male and female adolescent brains (Jensen & Nutt, 2014). It has been argued that female adolescent brains develop one to two years earlier than male brains (Jensen & Nutt, 2014), which is an important consideration for our current aged based schooling system. Males are expected to achieve the same as females in their classroom, despite not having reached the same stage of brain development (Jensen & Nutt, 2014).

Differences between the educational outcomes of males and females have been found in Australia (Bahr & Pendergast, 2007; Biddulph, 1997; House of Representatives,

2002) and indeed in most OECD countries (House of Representatives, 2002), with boys falling behind in most educational outcomes. The Program for International Student Assessment (PISA), which is co-ordinated by the OECD, assesses 15 year old students in more than 70 countries (Thomson et al., 2016). The 2015 data demonstrated that females outperformed males in Australia and all other participating countries in reading literacy, however, males outperformed females in science and mathematical literacy (Thomson et al., 2016). Despite males outperforming females in science and mathematical literacy, the difference was found to be not statistically significant for Australia. The only statistically significant difference for Australia in the PISA 2015 was in reading literacy, where females performed better (Thomson et al., 2016). Although there are always boys who excel and do well in the school system, generally they are being outperformed by girls overall (Bahr & Pendergast, 2007). It is important for educators to recognise the different educational needs of the different genders and cater for these accordingly in the classroom. While much of the previous literature focussed on gender outcomes, there is a current move to focus more on programming and how to cater for boys and girls in classrooms, rather than just the differences (Biddulph, 1997; Lahelma, 2014; Mills et al., 2007).

The literature has illustrated that despite acknowledgement of differences in the needs of males and females (Biddulph, 1997, House of Representatives, 2002; Lahelma, 2014; Perry & Pauletti, 2011; Thomson et al., 2016), little relevant information exists to guide the development of specific programs, such as the one offered at the SSL, which represents a distinct gap in the literature.

Middle Years Schooling and Year 9 Programs

A plethora of research exists in relation to the effectiveness of curriculum reform and middle schooling both in Australia and internationally (Bahr & Pendergast, 2007; Bissett, 2005; Carnegie Council, 1995; Pendergast & Bahr, 2010; Prosser, 2008). However, most of it relates to mainstream schooling. Given that the SSL was established as a means of engaging middle years students (Longmire, 2010; Margetts, 2010), it was valuable to examine this literature in terms of adolescent needs and best practice curriculum for middle schooling.

When the SSL was developed, middle years education was a focal point in Victoria for educational research and there was a perceived need for more middle years specific programs (Bissett, 2005; Cole, 2006). The focus of the literature on adolescence has often related to the development of the construction of the phase of 'middle schooling' (Bahr &

Pendergast, 2007), and specifically the range of Year 9 programs that have been established to meet the identified needs associated with middle school years (Cole, 2006). Much of the literature on adolescence focussed on the challenges presented within these years (Catalano & Toumbourou, 2009; Eccles & Gootman, 2002) and the concomitant disengagement in the middle years (Bissett, 2005; Cole, 2006).

Middle years schooling. Prosser (2008) suggested that in order to understand the needs of adolescents in terms of positive development and to create programs for these youth, there was a demand for reform in middle years schooling both nationally and internationally. This involved school reform and development of specific programs for these students, of which the SSL offering was one such program (DEECD, 1999).

According to Bahr and Pendergast (2007), the middle years movement represents a "philosophical approach to teaching and learning that meets the unique developmental and educational imperatives of middle years students" (p. 205). Middle years students are generally recognised as being in early adolescence, aged between ten and fifteen, although different education systems have slightly different age ranges (Bahr, 2010). The middle years of education are years of significant change for adolescents (Cole et al., 2006b), where students are most at risk of disengaging from their education and not achieving their full potential (Bahr & Pendergast, 2007; Bellhouse, 2004; Bissett, 2005; DEECD, 1999).

Internationally a range of developments have been implemented in an effort to cater for these students (Cole et al., 2006b). Prosser (2008) outlined the history of middle school reform, with particular reference to the United States and Australia. He noted that in the United States the reforms took place after the Carnegie Report (1989), with Australia following suit shortly afterwards. One key difference was that in the United States there were already middle schools, in the form of junior high schools, whereas in Australia, secondary education included junior and senior schooling together.

In the United Kingdom, a middle school reform known as 'Key Stage 3 Strategies' commenced in 2001 (Stobart & Stoll, 2005). This was introduced due to a dip in engagement and performance in 11-14 year olds, known as Stage 3 in their schooling. The reform involved a cross-curricular approach, with numeracy and literacy presented across subject areas. It was described by Stobart and Stoll (2005) as a more pupil centred approach to learning, and involved assessment for learning and explicit teaching of thinking skills.

In Australia, throughout the 1970s and into the 1980s, educators were concerned with developing better responses to tackling disengagement. According to Prosser (2008):

> the rationale overwhelmingly used by middle schooling advocates in Australia (Barratt, 1998; Braggett, 1997; Cumming, 1993; Eyers et al., 1993) was that early adolescents have specific developmental characteristics that need specialised support. The positive side of this view can be a middle schooling interest in student engagement, negotiated curriculum, integrated learning and authentic assessment. The negative side can be a popular construction or 'deficit view' (Carrington, 2006; Harram et al., 2005) of early adolescence as a time of hormone-driven behaviour, incompetence, hazard, liability and risk, an image that evokes fear and requires control. (p. 155)

Prosser (2008) argued that the middle school reforms, which commenced in the 1990s, did not keep up with the changing needs of middle school students. He advocated for a stronger focus on student centred learning, flexible timetabling and an integrated curriculum. With this structure, middle school students would be more challenged and hence engaged. While Prosser (2008) acknowledged that some change had taken place, he argued there was a need for more.

Year 9 programs in Victoria, Australia. In the late 1990s, the Victorian Department of Education and Training (DE&T) (1999) began to focus specifically on middle years schooling and extended the middle years to include Year 9, whereas previously it had included Years 5-8. Projects such as the Middle Years Pedagogy Research and Development (MYPRAD), (DEECD, 2012, para. 3) were undertaken to examine middle years teaching practices. Many schools commenced reform through school improvement processes with a target of increasing student engagement in the middle years. Transition was highly valued and programs with an integrated focus were the flavour of the day. Many schools altered their building programs to support middle years learning and involved students in community based projects (DE&T, 1999).

In a report on Victorian education, Bissett (2005) stated that it would come as no surprise to anyone involved with Year 9 that it "is a very difficult year for teachers and students and that the traditional models of learning and teaching are not successfully engaging the majority of Year 9 students and meeting their learning needs" (p. 14). The highest rate of disengagement and truancy occurred in Year 9 (Department of Education and

Early Childhood Development (DEECD), 2009). The traditional model of schooling, with students sitting at desks with a teacher out the front at the blackboard, did not appear to be working for this cohort of students (Cole, 2006). According to Cole et al. (2006b), Year 9 students "have been identified as unique in terms of learning needs. Indeed, the identification of Year 9 as a distinct phase in schooling arose from concerns that schooling arrangements did not give sufficient attention to the needs of these students" (p. 2).

Cole (2006) summarised data from a Victorian report for the Victorian Quality Schools projects by Hill, Rowe, Holmes-Smith and Russell (1996) and found the following results for Year 9 students in Victoria:

- the growth of student learning in basic skills (literacy and numeracy) flattens markedly, on average, from Year 5 through to Year 8
- student perceptions of self-regulation, reflectiveness, self-correction and depth of learning declines from Years 5-9
- student attitudes to school and engagement in learning decline between Years 5-9 and this decline varies markedly between schools
- student views of the quality of teacher-student relationships decline in Years 8-9
- student satisfaction with learning and school work declines in Years 8-9. (p. 2)

In 2006, a two-part document titled, *Understanding Year 9* (Cole et al., 2006a; Cole et al., 2006b), was circulated to all Government Schools in Victoria. It provided evidence that student engagement was dropping significantly in Year 9 and this was subsequently viewed as a focus area for school development. The document was twofold – one section included the theory behind learning and development in Year 9, looking specifically at adolescent development. The other section focussed on a number of ideas for curriculum development to cater for Year 9 students. As a result, part of the priorities for the middle years was to include flexible learning and community involvement. Timetable structures were examined, and professional learning teams involved in middle years were formed. Community based learning and cooperative projects were a focus. It was noted in this document (Cole et al., 2006b) that successful learning occurred when students were motivated and engaged in their learning. In 2009, the 2006 document was supported with a forum report (DEECD, 2009a) into Year 9 students, which listed a number of case studies

and exemplary schools catering for this group. In the report, Glover (DEECD, 2009a) noted that Victorian results for achievement and engagement at Year 9 level mirrored most other OECD countries.

Allen-Craig and Miller (2007) claimed that the reason so many programs existed for Year 9 students in Australia was the correlation between significant adolescent change and this year level. In addition to being a time of transition (from childhood to adulthood), adolescence is also a time when health risks such as suicide, drug use, depression and school dropout are experienced due to emotional maladjustment (Heaven, 2001). As a result, many programs have been developed to try and mitigate these negative behaviours rather than focussing on positive development of students (Allen-Craig & Miller, 2007; Carnegie Report 1995; Lerner et al. 2005).

The focus on middle years and particularly Year 9 education in Victorian schools (Cole, 2006; Cole et al., 2006b; DEECD, 2009a) was driven by declining academic and engagement rates for Year 9 students. The needs of the adolescent, and how to best cater for these students, underpinned recommendations for policy and practice for Victorian schools in the coming years (DEECD, 2009). This was evident in the case studies of best practice in the forum report (2009a) and indeed by the development of the SSL program (SSL, 2010-2012; Reeves, Dyson & Plunkett, 2018). The drive for curriculum reform came from declining performance (Cole, 2006; Cole et al., 2006b) and was aimed at increasing school retention and academic performance (DEECD, 2009a). Little focus was given to building the strengths of adolescents, as would happen in a PYD framework. As such, the lack of research framed around a PYD perspective indicated a gap in the literature.

Many schools in Victoria have, in the last decade, implemented programs specific to the needs of Year 9 students (DEECD, 2009a). One such program was researched by Robinson (2012), who investigated a Year 9 experiential program at a private school in Victoria, specifically examining the engagement of students and their relationships with teachers when participating in this program. The program consisted of a number of authentic learning experiences and some outdoor education components. Robinson (2012) was able to follow the students through to Year 12 and his findings supported lasting positive impacts for student engagement and teacher-student relationships as a result of participation in this program. This program was non-residential in nature, and unlike the SSL, involved students from one cohort over time. According to Robinson (2012) the needs of Year 9 students are

just beginning to be catered for in schools in Victoria and there is still much work to be done.

The SSL program was developed with the needs of the adolescent and middle school reform in mind (Margetts, 2010; Reeves, Dyson & Plunkett, 2018). Research so far has largely shown that the students attending the SSL are engaged in their learning (Dyson & Zink, 2007; Dyson & Zink, 2008; Dyson & Plunkett, 2010; Dyson & Plunkett, 2018), but does this engagement help them develop positively and contribute to society? Does it have a long lasting effect? More research is needed to determine the longitudinal effects of programs that cater to identified adolescent needs.

Research on the School for Student Leadership

Since the inception of the Alpine School in 2000 there has been an expanding body of research about the school (Dyson, 2009; Dyson & Cairns, 2001; Dyson & Plunkett, 2010, 2012, 2017; Dyson, Plunkett & Dyson, 2010; Dyson & Zink, 2007, 2008, 2009, Joyce, 2018, Reeves & Plunkett, 2018; Schneider, 2017). This research has been largely co-ordinated by Dr Michael Dyson, Assoc. Prof Margaret Plunkett, Assoc. Prof Len Cairns and Dr Robyn Zink. It has focussed on the areas of Information, Communication and Technology (ICT), parent and student perceptions of the program, teacher attitudes, engagement of students, leadership and co-operative learning. Mainly qualitative research has been conducted, although a number of the studies incorporated mixed methods. Research tools, which included surveys and interviews, have been used to measure changes from the beginning to the end of the program. Much of the research on the school has recently been collected into a book titled, *Surviving, Thriving and Reviving in Adolescence: Research and Narratives from the School for Student Leadership,* edited by Dyson and Plunkett (2018).

In addition to this research, the school has participated in the student and staff opinion surveys undertaken every year by the Victorian Education Department (SSL Annual Reports, 2000-2012). The data from these opinion surveys has consistently ranked the SSL as a top performing school (SSL Annual reports, 2000-2012). The research overall has shown that students have been engaged and focussed during their time at the SSL (Dyson & Cairns, 2001, Dyson & Zink, 2007, 2008, 2009; Dyson, 2009; Dyson & Plunkett, 2010, 2012; Dyson, Plunkett & Dyson, 2010; Dyson & Plunkett, 2018; Schneider, 2017). Students have seen the program as effective and their self-efficacy has improved during their time at the school. Students have reported the development of strong friendships and having valued their time and learning at the school (Dyson & Cairns, 2001, Dyson & Zink, 2007, 2008,

2009; Dyson, 2009; Dyson & Plunkett, 2010, 2012; Dyson, Plunkett & Dyson, 2010). While it is quite unique for an extensive body of research to exist in relation to one school, none of the research thus far has focussed on PYD. Other gaps relate to the lack of investigation of longitudinal impacts, gender specific outcomes and program length of programs offered at the SSL.

The first annual report for the Alpine School in 2000 stated that the "learning is quantified by anecdotal evidence" (Alpine School, 2000, p. 5). This is a strange statement as anecdotal evidence is not able to quantify data easily. However, it may provide some qualitative data to analyse student data. The report stated:

> evidence suggests students become more self-sufficient, better able to deal with adversity and diversity, better able to solution find, better team and autonomous workers as required, are conscious of their preferences in learning and working, and overall become accomplished in the application of LT (learning technologies) and IT (information technologies) in their learning. (Alpine School, 2000, p. 5)

The Alpine School annual report (2000) was authored by the school Principal, Mr Mark Reeves, in conjunction with School Council members and staff. Although it used data from the state-wide surveys, it was a fairly subjective document, designed to reflect the school in a positive light. Therefore, it was important that external independent research was also used to evaluate the school program.

It was recognised in this report (Alpine School, 2000) that data and further evidence were needed to determine the effectiveness of the school program. The Alpine School committed to establishing base-line data and on-going impact studies on the effectiveness of this learning model. Hence a research program in conjunction with the Gippsland campus of Monash University focussing on self-efficacy, ICT skills and leadership was developed. The need for on-going and further research related to the school continues, particularly as the school expands and caters for more students with the potential for a greater range of programs. A recent example of the on-going research was the report submitted to the Department of Education, Victoria, by Dyson and Plunkett (2015) on the effectiveness of the China immersion program. As a result of this research, five additional programs to China have been funded by the Department of Education for 2015 and 2016 SSL students, and the program was continued into 2017.

The SSL has continued to achieve results at the 95th percentile on student engagement surveys undertaken by the Victorian Department of Education since its inception (Dyson & Plunkett, 2013). These results are derived from the Attitudes to Schools Survey which the Department of Education has conducted with all Victorian schools since 2006 (DET, 2016). These surveys are conducted to gain a greater understanding of the perceptions and experiences of students at schools in Victoria (DET, 2016). The SSL's results surpass virtually all the other State schools, particularly at Year 9 level (Dyson & Plunkett, 2013). In the 2015 Annual Report, the Alpine School referred to the student engagement results from this survey:

> Engagement refers to the extent to which students feel connected to and engaged in their learning and with the broader school community. Learning Confidence rates at 4.31 out of a possible 5.00 on the Student Survey. Engagement spans students' motivation to learn, as well as their active involvement in learning. Student Motivation rates at 4.65 out of a possible 5.00 on the Student Survey instrument. Engagement also refers to student engagement as they make critical transitions through school and beyond into further education and work. (Alpine School, 2015, p. 2)

A number of attempts have been made to try and determine how the SSL program supports this level of engagement. For example, in a 2005 paper, a model of student engagement structured from the SSL research known as the Actuality Model of Student Engagement (AMOSE) was presented (Cairns & Dyson, 2005). Some of the key features of the AMOSE were that students needed to perceive the task as practical, enjoyable, useful as well as seeing others were engaged in the same or similar task. The learners needed to be provided with an environment to make the task achievable. This research showed the 'how and why' of student engagement at the SSL (Cairns & Dyson, 2005).

Another of Dyson's (2009) research papers examined a group of Indigenous Koori (Aboriginal) students who attended the program at the Alpine School campus for six weeks. At the end of the program they concluded that students had, despite some issues, "left the school feeling more confident, able to live and work with other people, respected themselves and others more and had a much greater understanding of and appreciation for their own cultures" (Dyson, 2009, p. 15). In Dyson's study (2009), he used Glasser's (1998) Choice Theory to investigate students' experience of the school, concluding that the Alpine School

was a 'Quality School', in that it fitted with Glasser's (1998) Choice Theory of providing for the flourishing of positive relationships, including:

- Recognition that getting on with others is important
- A non-punitive environment exists
- Personal responsibility is a constant
- Self-evaluation, self-control and personal responsibility is evident
- Time is provided to deal with issues, and students feel listened to by teachers
- Consistency of approach by the staff, to management throughout the school, is evident. (Glasser, 1998 cited in Dyson, 2009, p. 16)

Once again, this research focussed on how the school achieved outstanding results in terms of being a 'quality school'. There is, however, a lack of research on the implications of this for the future development of these students.

This lack of longitudinal research was somewhat addressed by Zink and Dyson (2008), who looked at student perceptions of their experience of the Alpine School a number of years after their involvement. They used a qualitative approach and interviewed students from previous cohorts, some having finished the program 6-7 years previously and others in the year before the study, but the samples were small. Zink and Dyson (2008) examined the transfer of learnings from the Alpine School to the students' learnings back in their home life and schooling. They found that some aspects were difficult to transfer, as there was little understanding or support of the program at the home school, and that mainstream schooling was so different from the SSL. Some students found working on their Community Learning Project frustrating upon their return to their home schools. While none of the students felt compelled to continue in leadership roles, it was noted that many of them did so. The question remained whether this was a result of attending the Alpine School, or would it have happened anyway? Some acknowledged they were participating in programs that they would otherwise not have had confidence nor interest. The researchers acknowledged the difficulty of establishing any direct links, focussing more on the perceptions of participants about their involvement in the program. It is very difficult to determine if participation in a SSL program has a causal effect on an increase in leadership participation post program. More research is needed to determine what effects the program has on students once they return to their home school.

The relationship between the SSL and co-operative learning was examined by Dyson and Plunkett (2012), with reference to Johnson and Johnson's (2009) five essential elements

of co-operative learning: positive interdependence, individual accountability, promotive face-to-face interaction, interpersonal and small group skills, and group processing. Through interviews, this research found that although the SSL program did not explicitly set out to use co-operative learning theories as a framework for its curriculum and processes, the teaching and learning at the school positively met all the criteria of cooperative learning (Dyson & Plunkett, 2012). Schneider (2017) conducted a mixed methods study which focussed on the development of student leadership at the SSL. He found that the students perceived an overall growth in their capacity for leadership due to the nature of the program. Schneider (2017) suggested a need for further longitudinal analysis to ascertain the impact of the SSL program on student leadership in the years after the program.

Dyson and Plunkett's research (2012) clearly illustrated that the SSL's residential program provided an environment that was supportive of cooperative learning. the major focus of this research was on the students who participated in the SSL over the past decade. Students developed skills in relation to self-awareness, reflection, leadership and conflict resolution, all of which were essential tools for helping them to remain engaged with their learning once they left the SSL. (Dyson & Plunkett, 2012)

John Margetts is a retired Principal with expertise in outdoor education programs, who acted as a project manager for the establishment of the Alpine School. He made a speech at the SSL for its tenth anniversary, in which he noted that, "after research and a review of the literature, I am convinced there is little like its approach in the Western World and almost certainly nothing like it in the developing world" (Margetts, 2010). This illustrated the difficulty of finding comparable programs to inform this research. Whilst there are many outdoor education programs, and alternatively many residential settings, such as boarding schools, in education, there are few schools like the SSL, particularly in any state education system (Margetts, 2010). Although some schools in the Australian private sector offer extended residential outdoor education programs, such as Glengarry (The Scots College, 2015), Marshmead (Methodist Ladies' College, 2012), Clunes (Wesley College, 2015), Timbertop (Gray, 1997) and Howqua (Lauriston Girls' School, 2015), there is still a paucity of research on the effectiveness and outcomes of such programs (Gray, 1997; Longmire, 2010; Mcdonough, 2002).

In summary, the research on the SSL supports it as offering a very successful program in terms of engaging Year 9 students in a meaningful way (Dyson & Cairns, 2001, Dyson & Zink, 2007, 2008, 2009; Dyson, 2009; Dyson & Plunkett, 2010, 2012; Dyson,

Plunkett & Dyson, 2010; Dyson & Plunkett, 2018; Joyce, 2018; Schneider, 2017). Data supported a short term positive impact on students and the existence of a cooperative learning environment. The program ticks many of the boxes in terms of providing for the specific needs of middle years students. While some research involved following students up post program to determine if any effects of the program were lasting (Zink & Dyson, 2008), more research is needed before any definitive findings on long term impact can be made. There was also no research concerned with the optimal length of an alternative residential program for lasting and effective impact upon participants, nor the outcomes for different genders. Additionally, none of the previous SSL research had been framed within a positive psychology framework, yet this paradigm is an important one for the development of emotionally sound adolescents.

Outdoor Education

There is a substantial body of both national and international research into outdoor education programs (Hattie et al., 1997; Neill, 2009), and although technically different to the SSL, it nevertheless has some relevance to the current study. Although the SSL does not offer an outdoor education program as such, there are some similarities and overlaps with programs that focus on outdoor education (Margetts, 2010). Many of the intended outcomes of outdoor education programs, such as personal and social development, as well as physical, recreational, environmental and therapeutic goals (Neill, 2002) are similar to the mission of the SSL of providing "opportunities for personal, community and leadership development" (SSL, 2010-2012, para. 3). Hence there is considerable relevance in the research into the impact of participation in outdoor education programs. It was considered worthwhile to examine this body of literature to determine which factors have been seen as important components of these programs, especially in terms of positive adolescent development

During participation in the SSL program, staff ensured that the program is not referred to as a 'camp' (personal communication, March 2012). This is due to the association of school camp with recreation activities and 'just for fun' activities, whereas the SSL prefers to be associated with a school setting, whereby activities are undertaken for learning purposes. This is not to demean the outcomes associated with school camps, but rather to ensure that students view the SSL experience as an overall opportunity for personal growth and not just a 'fun' intermission from the routine of mainstream schooling. Therefore, the SSL does not refer to itself as an outdoor education institution, rather that

some experiential learning opportunities take place in the outdoors, using a variety of adventure activities. Although this is a large part of the program, the curriculum extends far beyond an outdoor education program (SSL, 2010-2012). Nevertheless, it was deemed valuable to examine gaps in the literature relating to outdoor education, to assist in determining the direction of the current research.

Definition of outdoor education. The first difficulty in examining the literature on outdoor education was conceptualising the term. This was because no two outdoor education programs are identical and a myriad of definitions exists (Neill, 2008b; Quay, 2016). This in turn made research into the field of outdoor education difficult to compare.

Neill (2008b) emphasised the variety of definitions by devoting an entire page on his website - *wilderdom.com* - to a variety of definitions of outdoor education. Outdoor education has often been referred to by other terms such as 'adventure education', 'environmental education', 'wilderness education' and 'challenge education' (Cason & Gillis, 1994). Lappin (2000) broadly defined the term as "a means of curriculum enrichment, whereby the process of learning takes place out of doors. Outdoor education broadly includes environmental education, conservation education, adventure education, school camping, wilderness therapy, and some aspects of outdoor recreation" (p. 1). Another definition provided by Priest (1990) was, "an experiential method of learning with the use of all senses. It takes place primarily, but not exclusively, through exposure to the natural environment" (para. 2). Neil (2008a) conceptualised outdoor education as, "organised, small group, multi-day expeditions in relatively natural environments, with an emphasis on experiential 'stress-inoculation' philosophy" (para. 1).

The relatively recently developed Australian Curriculum, which encompasses the Victorian Curriculum Foundation to Year 10, differentiates between outdoor education and outdoor recreation (ACARA, 2012):

> 53. Outdoor education engages students in practical and active learning experiences in natural environments and settings typically beyond the school boundary. In these environments, students develop the skills and understandings to move safely and competently while valuing a positive relationship with natural environments and promoting their sustainable use. Elements of learning in outdoor education will draw from content and achievement standards from across the Australian Curriculum

including Health and Physical Education, Geography and Science. The primary content that will be drawn from Health and Physical Education will be in the area of outdoor recreation.

54. In the *Australian Curriculum: Health and Physical Education*, outdoor recreation refers to recreational activities, or the act of engaging in recreational activities, that are typically associated with outdoor, natural or semi-natural settings. These activities are an important part of learning in the Health and Physical Education curriculum in relation to promoting lifelong physical activity. Outdoor activities provide a valid environment for developing movement competence and enhancing interpersonal skills. (ACARA, 2012, p. 11)

In 2013, Hilbert and Bentley presented their definition of adventure education, arrived at by studying other researchers' definitions in addition to mission statements of various outdoor education organisations, as:

A field providing participants with an opportunity to: interact with the outside environment. Discover hard and soft skills through the act of the experience, work with an occasional sense of challenge, develop human skills (interpersonal and intrapersonal), develop one's character through personal growth and develop leadership skills. (p. 49)

These definitions highlight a discrepancy in understanding the nature of outdoor education. It is at times viewed as a series of adventure activities, such as would take place on a school camp, while others view it more holistically, as encompassing any education taking place outside the classroom (Brookes, 2002). This has been demonstrated in the Victorian curriculum with outdoor education evolving from a school camp program into a subject in the final years of secondary education – the Victorian Certificate of Education (VCE) (Adams, 2013). Outdoor education became a VCE subject in 1984, and in 2000 it merged with environmental studies to become VCE Outdoor and Environmental Studies (Adams, 2013). Victoria has a long history of outdoor recreation and camp programs in schools, both government and private (Brookes, 2002; Quay, 2016). Indeed, there is growing

popularity of outdoor education in schools. This was demonstrated during the 2010 state election campaign in which the Labor Party promised two week outdoor education programs for all government school Year 9 students (Brumby, 2010). This election promise did not come to fruition as the Labor Party were defeated. Outdoor education has also sometimes been seen in terms of personal development, rather than as an academic subject (Brookes, 2002) and certainly has had its detractors, such as one journalist calling it "devoid of any academic content … and Mickey Mouse" (Craven, 1990, p. 14). The definitional and developmental discrepancies in outdoor education and recreation programs in Victoria have certainly impacted on the level of consistency of research within the field (Brookes, 2002; Hattie et al., 1997; Neill, 2008a).

This variance in meaning did make the examination of research on outdoor education programs challenging. It appeared that no two programs in outdoor education were the same, so comparing and analysing them was like comparing chalk and cheese, particularly when many of the studies involved very small samples (Cason & Gillis, 1994, Hattie et al., 1997; Lynch, 2012a). While determining a definition of outdoor education was not the purpose of this current study, it was still important to recognise the variety of definitions and terminology without selecting a distinct definition. However, despite the differing definitions, the associated programs often had similar aims and outcomes, enabling measurement of the effectiveness of the programs in meeting these aims through careful research often involving the use of meta-analyses (Cason & Gillis, 1994; Neill, 2008a).

Research in outdoor education. Most of the research in outdoor education has been undertaken as studies of individual programs (Booth & Lynch, 2010; Cason & Gillis, 1994; Hattie et al., 1997). These studies have all been of varying sizes and scope, and have used a variety of instruments. Some were qualitative, some quantitative and some mixed methods. There have been countless pre-post empirical studies of outdoor education programs undertaken over the last decades (Cason & Gillis, 1994, Hattie et al., 1997). According to Neill (2002), most of these studies have involved measurement of psycho-social constructs, such as self-concept. Whilst vast and varied, research both nationally and internationally has been criticised as lacking a systematic approach and there are still many gaps in this research field (Booth & Lynch, 2010; Neill & Richards, 1997, Sheard & Golby, 2006).

The research in the field of outdoor education has sometimes been criticised as haphazard, not particularly robust and lacking peer review (Cason & Gillis, 1994). There are also a number of research projects which have targeted specific groups, such as at-risk

teenagers, so cannot be used to generalise the outcomes of other outdoor education programs (Booth & Lynch, 2010; Hattie et al., 1997; Priest, 2001; Sheard & Golby, 2006). Most of this research has tended to have specific foci and was generally not longitudinal in nature (Booth & Lynch, 2010). Hattie et al. (2007) noted difficulties with statistical error and low sample numbers in many of the studies covered in their meta-analysis. Neill (2002) stated that reviewing the literature on outdoor education studies of program effectiveness is difficult due to poor methodology, lack of cohesion and the fact that most of the studies are unpublished.

Brookes and Stewart (2016) conducted a review of citation patterns for outdoor education research published between 2000 and 2013, and found that "outdoor education publications as a whole have made no distinct impact in other fields" (p. 21). Their study indicated that a small number of articles gained a large number of citations, but most articles were never cited. Booth and Lynch (2010) synthesised 1135 New Zealand research reports on outdoor recreation and education between 1995 and 2010 and concurred that there was little cohesion in this vast array of studies. They were less critical of the outdoor education studies, noting that most of them were of a high quality. However, they commented that, "failure to apply standard research tools and to replicate proven research methods has hindered the development of an adequate information base" (p. i). After noting gaps and lack of depth in many topics, they argued for a consistent approach to outdoor education research in order for findings to be generalisable and to enable systemic future policy direction utilising research outcomes. In scanning the international literature, Booth and Lynch (2010) noted that gaps they had identified in the New Zealand literature also existed internationally. Lynch (2012b) summarised the findings regarding the outdoor education related literature (226 of the 1135 reports) as:

- not particularly large but fairly diverse,
- highly fragmented - there are many gaps and many topics need to be studied at much greater depth,
- neither cohesive nor systematic - there are few programmes of research on outdoor recreation-related outdoor education topics and little strategic direction in the body

of literature overall,

- generally concerned with singular, specific, often short-term, educational programmes,
- limited in scope and outlook: there are few interdisciplinary or international studies and there is more focus on the what goes on within outdoor recreation-related outdoor education than on connections between that outdoor education and other aspects of society. (p. 61)

Neill (2002) also conjectured that many of the outdoor education research papers have been notes in the form of rhetoric, anecdotal samples and testimonial support. Positive claims about programs abound, and "much of the research reads more like promotional literature rather than unbiased scientific research" (para 3). He noted a "tendency to uncritically promote the view that outdoor education programs are good things for people" (para. 3). Hattie et al. (1997) noted that many of the research papers read as "program advertisements rather than research" (p. 45). This is always going to be an issue in a field where the majority of researchers are also strong advocates and participants in the same field (Barbour, 2008). It is also difficult to conduct empirical scientific research within education due to the ethical issues that limit the use of pure experimental research designs and control groups (Howe & Moses, 1999).

Another issue, according to Priest (2001) is that outdoor experiential learning programs have been poorly evaluated. He stated that a program is a "collection of several learning experiences held together by logistics such as scheduling, staffing, equipment, meals, housing, transportation, communication, finances, and so on" (p. 24). As such there are so many variables to take into account when completing research on the effectiveness of programs. Ardoin, Biedenweg and O'Connor (2015) found that there was a tendency to use summative, post test measures to evaluate programs, rather than evaluate with intermediary measures, in order to determine what was happening during the program. Christie, Higgins and McLaughlin (2014), also criticised much of the research noting the limited high-quality empirical research in the area. They suggested that "much contemporary justification draws upon a handful of meta-analyses and reviews that suggest these types of programmes can have a significant impact on participants in terms of their self-confidence, social skills, motivation and their academic attainment" (Christie et al., 2014, p. 2)

McKenzie (2000), in a review of outdoor education research, claimed that although research exists into the outcomes of programs, little explains the 'how' of these outcomes. While outdoor education programs have generally been viewed as positively influencing participants, little quality research actually exists to back this up; most is anecdotal with little real evidence of positive psychological effects (Sheard & Golby, 2006). There were also instances where qualitative data and hypotheses were not evidenced by statistically significant results in the quantitative data (Hattie et al., 1997; McKenzie, 2000). This is a concern if the research is to be formally peer reviewed and relevant. Over 25 years ago, Gray and Patterson (1994) pointed out the paucity of quantitative research in outdoor education which could be useful in convincing educators of the value of such programs.

More recently Gray and Martin (2012) noted that the lack of research on educational outcomes in outdoor education has significantly impacted upon the resistance of ACARA (Australian Curriculum, Assessment and Reporting Authority) to include outdoor education as a separate discipline, or even a compulsory cross disciplinary strand in the new Australian Curriculum:

> Unfortunately the base that supports Outdoor Education's role in achieving outcomes for students relies heavily on philosophical positions, informal, or anecdotal evidence (Williams & Allen, 2012.) The weakness of Outdoor Education research is telling in any discussions of inclusion within a National Curriculum where sceptical rather than friendly ears dominate. Having clarity and visible knowledge of the impact of teaching is vital (Hattie, 2009) and particularly important in politically charged decision making. The short history of research efforts in Outdoor Education compared to other influences and disciplines is therefore limiting. (p. 41)

In an attempt to standardise the plethora of small scale studies of individual programs and create meaningful generalised data to back up claims of positive effects of outdoor education, a number of meta-analyses have been conducted.

Findings of meta-analyses in outdoor education. Meta-analysis is a statistical tool which collates, compares and examines the effect sizes from results reported in various research studies (Neill, 2008a). Effect size is the "standardised mean difference, or in other words, the amount of change resulting from participation in the programs under

consideration" (Neill, 2008a, p. 75) Meta-analysis accumulates the findings about a research question from different sources and evaluates the overall effects (Neill, 2006). According to Neill (2009) there have been seven main meta-analyses of outdoor education. Each meta-analysis focussed on slightly different studies as indicated in Table 2.1. These meta-analyses were conducted to attempt to counter some of the claims of inconsistency in outdoor education research (Cason & Gillis, 1994).

Table 2.1.

Overall Results from Seven Meta-Analyses Related to Outdoor Education

Study	Focus	*d*	*N studies*	*N effects*	*N participants*
Bunting & Donley (2002)	Ropes challenge courses	.55	15	na	Na
Cason & Gillis (1994)	Adventure programming for adolescents	.31	43	147	~7,030
Gillis & Speelman (2008)	Ropes challenge courses	.43	44	390	2,796
Hattie et al. (1997)	Adventure education and Outward Bound programs	.34	96	1,728	12,057
Hans (2000)	Adventure programming locus of control outcomes	.38	24	30	1,632
Marsh (1999)	Camping programs	.20	22	37	Na
Staunton (2003)	Adventure therapy programs	.42	17	95	~1,000
Wilson & Lipsey (2000)	Delinquent youth in wilderness programs	.18	28	60	~3,000

Note. Retrieved from J. Neill, Wilderdom. Copyright 2009

As illustrated in Table 2.1, the size and sample of each of the meta-analysis varied considerably. Each focussed on different programs, and none focussed on specific school based outdoor education programs. In Table 2.1 '*d*' measures overall effect size. In terms of effect size, 0.2 is regarded as a small change, 0.5 a medium change and 0.8 is a large change (Cohen, 1988). These seven meta-analyses illustrated a consistent finding of a small-moderate positive impact on participants as a result of engagement with the outdoor education programs.

Neill's research review (2002) demonstrated that outdoor education programs have small to moderate impacts on constructs such as self-concept, locus of control, and teamwork. He also found that most of the effects appeared to be retained over time and the most effective programs were longer than two weeks (Neill, 2002). Recommendations that emerged from this research review were that "future research should seek to understand more about why different programs and different participants achieve different outcomes and the optimal sizes to be used by outdoor education programs to monitor educational effectiveness" (Neill, 2002, para. 1).

Although now two decades old, Neill and Richard's (1998) review of research is still highly pertinent in terms of identifying outcomes of outdoor adventure education programs. They reviewed studies already completed, representing over twelve thousand participants, and found that "65% of those who participated in outdoor adventure programs were better off than those who did not participate" (Neill & Richards, 1998, p. 3). Better off was defined as having higher self-esteem and self-worth, and outdoor adventure programs made a valuable contribution to a person's sense of her or himself. According to Neill and Richards (1998),

> These results are a positive endorsement of outdoor education as a legitimate and effective educational training method, evidence that has arguably been wanting until now. Outdoor education definitely has something to offer. A particularly impressive strength would seem to be that outdoor education programs can trigger in participants an ongoing cycle of personal growth, as evidenced by the positive follow-up findings. (p. 7)

Nevertheless, there was a caution raised by Neill and Richards (1998) about the use of the results of meta-analysis to generalise for effectiveness of all programs. The result of a positive effect size is from an average – therefore some programs would be well below average, and others above. Individual programs still need to be audited and evaluated using a consistent and rigorous method.

Even though statistical testing methods have developed over the past decade with continuous improvements to programs such as SPSS, there appears to be a dearth of similar comprehensive meta-analyses from the last ten years in the field of outdoor education.

Whilst the above meta-analyses are still cited in outdoor education research papers, some are now almost two decades old, and as such, a clear need exists for new research in this field.

What all the reviews and meta-analyses of outdoor education program research call for is a more consistent approach to measurement of program effects on participants. The haphazard approach to outdoor education research, as previously noted, should be a warning to any researcher attempting to measure program effectiveness. The research needs to be significantly robust in order to make a significant contribution to the field. Small case studies using only one method of data collection should not be used to generalise about the field of account for a number of variables. Also sample size and analysis methods need to receive due consideration when reporting on studies, or recommending action based on these studies.

Instruments used to measure outcomes in outdoor education. In the 1970s much of the research was based on narrative and qualitative data, with little heed given to the reliability and validity of measurements used (Hattie et al., 1997). Recently, more research studies have involved the use of quantitative data or mixed methods (Allen-Craig & Miller, 2007; Christie et al., 2014; Gillespie & Allen-Craig, 2009; Robinson, 2013). Two main empirical methods of program evaluation tend to be used - post program surveys and pre-post surveys (Ardoin, et al., 2015; Gillespie & Allen-Craig, 2009). These involve surveys administered either just at the completion of a program, or a survey administered at the beginning and then again at the completion of a program (Ardoin et al., 2015; Gillespie & Allen-Craig, 2009; McLeod & Allen-Craig, 2007; Neill, Marsh & Richards, 2003). Ardoin, et al. (2015) conducted an applied literature review of evaluation in residential environmental education. They recommended a focus on measuring intermediary outcomes, rather than formative and summative assessment of outcomes alone. Although sometimes difficult to define and hence measure, they suggested that by measuring intermediary outcomes, there could be a greater understanding of what actually happens during the program, rather than just measuring results post program, which results in a time lag.

Post program surveys are often seen as problematic due to post group euphoria (PGE) (Leather, 2013; Neill, 2006), which is a common occurrence in outdoor education programs where students have had an engaging time and ended the program on a crescendo of positive emotions, which may, over time recede (Leather, 2013). Gray (1997) also referred to problems with bias in the initial program survey of her study of Timbertop, with the possibility of the participants' heightened expectations of the program and self-ability

and a sense of euphoria upon commencement of the program. She surmised that this may have over inflated the initial sores and suggested a pre-program data collection point (Gray, 1997).

One instrument that has been used in a number of Australian and international studies of outdoor education programs is the Life Effectiveness Questionnaire (LEQ) (McLeod & Allen-Craig, 2007; Neill et al., 2003). For example, McLeod and Allen-Craig, (2007), Gillespie and Allen-Craig (2009); Mcdonough (2002); Neill (2008a); Allen-Craig and Miller (2007); and a Scottish study by Christie et al. (2014) have all utilised this instrument. It measures personal development through eight domains: time management, social competence, achievement motivation, intellectual flexibility, task leadership, emotional control, active initiative and self-confidence (Gillespie & Allen-Craig, 2009; McLeod & Allen-Craig, 2007). Although initially developed for use in outdoor education programs with adults, it has also been used for adolescents, and provides an overview of program effectiveness which can be either in the short or long term (Neill, 2006).

The LEQ is only one of a range of tools used in outdoor education research. Others include scales such as the Adolescent Coping Scale, developed in Australia (Frydenberg & Lewis, 2012), the Self Perception Profile for Adolescents, developed by Harter (1988) and the Rosenberg Self Esteem Scale (1965). All are used to measure different outcomes relating to personal development. However, as no two programs are the same, it appears unlikely that one instrument could be universally applied to all outdoor education research. It is important to utilise the most valid instrument for the research question and the context of the research (O'Toole & Beckett, 2010).

Program length in outdoor education. A feature that varies greatly amongst outdoor education programs is program length. Outdoor education programs for school students vary from day trips (Dillon et al., 2006) through to year-long residential programs such as that offered at Timbertop, a residence owned by independent school Geelong Grammar (Gray, 1997). Even at the SSL, the program has varied in length from two to ten weeks over the years (SSL, 2010-2012), and as outlined in this section, program length can affect outcomes.

A meta-analysis conducted by Cason and Gillis (1994) concluded that the only program effect that moderated their conclusion was length of program. Their study found that the length of a program had a weak positive linear relationship with the outcomes of a program. However, they could not determine optimal program length from their study:

> A significant positive correlation was found between the length of the program and the effect size (r=0.174, p=0.008). Program lengths were measured in hours, and groups spending consecutive days in a wilderness setting were estimated to have spent 18 hours per day in adventure programming. Durations ranged from 36 to 5400 hours (ten months) with a median length of 54 hours (three weeks). Three weeks was considered a moderate length and was the program duration for 41% of the outcome measurements taken (mostly from Outward Bound or Outward Bound-type programs). Shorter programs represented 27% and longer programs represented 32% of the sample. Statistical analysis revealed significant differences between effect sizes associated with longer programs when compared with effect sizes associated with shorter or moderate length programs…the results of this meta-analysis would suggest that adventure programs are more effective if they are longer, however, this analysis was unable to determine an optimal length of adventure programming. (Cason & Gillis, 1994, p. 44)

Neill (2008a) undertook a large Australian study examining a range of factors that impact on outcomes of outdoor education programs, including group size, program and program length. He found no significant differences in gender, group gender or group size, however he did find a weak positive correlation between longer program lengths and positive benefits. Hattie et al.'s (1997) meta-analysis found that programs greater than 20 days had a larger effect on outcomes. However, this meta-analysis included Outward Bound programs for adults and omitted any studies that were school based outdoor education programs, which is a gap that exists in the literature.

Booth and Lynch (2010), in a review of literature in New Zealand, noted a lack of comparison of similar youth across different outdoor programmes despite large differences between programs (Lynch, 2012b). This was seen as a significant gap in the research literature both for New Zealand and internationally. Dillon et al. (2006) found, in a review of over 150 international research papers, considerable evidence that longer programs made more difference. However, many of the longer programs he cited (Bogner, 1998; Emmons,

1997) were only of five days duration. As there appears to be no consensus in the literature on what length of program constitutes a long program, it is difficult to make any conclusions as to the results of overall program length and outcomes.

Longitudinal research in outdoor education. Many outdoor education researchers have cited the need for longitudinal studies into outdoor education programs that track outcomes over time (Ewert & McAvoy, 2000; Goldenberg et al., 2010; Sibthorp, 2003; Sibthorp, Paisley, & Furman, 2008). Few studies have specifically examined longitudinal outcomes (Goldenberg, McAvoy, & Klenosky, 2005; Goldenberg et al., 2010; Sibthorp et al., 2008). However, it is important to understand the potential benefits and impacts of programs over time (Ewert & McAvoy, 2000; Goldenberg et al., 2010). Priest (1999) discussed the need to investigate "what transfers, how much of it, for how long, and because of what program elements or barriers" (p. 315). The studies to date which have investigated longitudinal outcomes have predominately found positive outcomes from program participation endure from periods of months to years after the program (Christie et al., 2014; Goldenberg et al., 2010; Neill, 2008a; Robinson, 2013).

Neill (2008a) undertook the largest study of outdoor education programs in Australia to date, with 3640 participants in the original study and 630 in the longitudinal study. This research also examined independent variables such as program length, program type and age of participants. It found evidence that the examined outdoor education programs had at least small to moderate impacts on the life effectiveness of participants, and 80% of short term benefits were retained by the participants in one of the young adult programs after six months. Short term change was found to be positive across all programs, to the amount of half a standard deviation and long term change (up to six months) was found to be slightly less, at one third of a standard deviation, but still positive (Neill, 2008b).

Hattie et al., (1997) found that effects of the programs continued to develop after completion of the program with a small effect size. Another study which found continued positive impacts three years after a program was Goldenberg et al.'s (2010) study of Outward Bound and National Outdoor Leadership School courses in the USA, which examined outcomes for participants aged over 14, in programs of greater than three weeks length over a period of three years post program. In an Australian study of Outward Bound programs, Marsh, Richards and Barnes (1986) also found positive outcomes for a range of self-concept dimensions 18 months after program participation.

A study in Scotland by Christie et al. (2014) evaluated week long Outward Bound programs using the LEQ and interviews. This study also involved follow-up three months post participation. While the quantitative data demonstrated no significant effect of the program on students when compared to a control group, the qualitative data suggested some impacts on students, most of which were positive. Discussion in Christie et al.'s (2014) research involved examining interactions between the school curriculum and follow up of the residential experiential program. It suggested that there needed to be more recognition of the program by the mainstream school post student participation.

McNatty (2016) undertook a study which examined aspects of transitioning back to mainstream school post a 28 day program for girls in New Zealand. She concluded that:

> a well-managed transition into society following such experiences can raise the expectations, roles, and responsibilities of the participants so they continue to develop and learn. These long duration outdoor experiences are especially valuable at times when adolescents need a healthy transition into adulthood. (p. 49)

McNatty (2016) found that the transition and reintegration process was more successful when it was begun during the last week of the program and included staff from the mainstream program to which the students returned.

Robinson's (2013) research, which involved an experiential outdoor program offered as part of the Year 9 curriculum at a Victorian school, examined post program student engagement and the impact of the program on learning. His research, like Neill's (2008b), supported a continuing positive influence on learning engagement up to three years post program. Yet Brookes (2003) questioned many of the findings of research and meta analyses of outdoor education and their assumption that one experience can be character building. He argued that character traits cannot be changed, but behaviour may change, and perceived traits can be adapted by outdoor education programs. He built a case for the lack of transference between an outdoor education experience and life after the program, claiming that while behaviour may change due to a presented situation, the ability to recreate this behaviour in a different context was dubious (Brookes, 2003).

Gender differences in outcomes in outdoor education. Up until the 1980s the field of outdoor education was largely male dominated (Neill, 1997). In the last few decades, however, there are increasingly more females both leading and participating in outdoor education programs (Gray, Allen-Craig & Carpenter, 2017; Neill, 1997). There is a growing

body of research examining the effectiveness of outdoor programs for females (McKenzie, 2000; Neill, 1997; Witman, 1995). However, Gray et al., (2017) noted that the female narrative is underrepresented within the outdoor education field, despite the growing number of female participants. Following literature pertaining to outcomes for males and females in outdoor education programs is examined.

Neill's (1997) research found that the literature had focussed on largely female only or mixed programs, rather than any male only programs. In addition to this, the research tended to look at gender as "a variable in studies of the processes and outcomes of outdoor education" (Neill, 1997, p. 1). His meta-analysis of 39 outcomes from 32 studies concluded that for 19 of the outcomes, the change was similar for males and females. This was predominately for the studies which focussed on personality. For 17 of the outcomes, females had larger change scores and there were only three outcomes where the males had the larger change scores. Neill (1997) alluded to possible reasons for these results, including females having lower scores to begin with at the start of the programs (not always the case), and the different motivations of female participants. The females who participated generally had higher ideal self-concepts and were more open to personal development, seeing the program as a journey, rather than just an activity. Interestingly, he noted that the studies where the males had a greater change rate were for a shorter 10 day long program, which may not have been enough time for the females to overcome any physical fears and gain in development. Neill (1997) concluded that, while differences may have been due to methodological issues or motivational differences, it could be "that the masculine orientation of the majority of outdoor education programs impels females into greater growth than males" (p. 8).

A more recent USA mixed methods study by Overholt and Ewert (2014) examined resilience gained from an outdoor education program and the different outcomes for males and females. They discovered that males' resilience decreased one year post program, whereas females' resilience increased. From their in-depth interviews, they attributed some of this to females perceiving risk differently to males, and having a lower self-perception at the start of the program. Males were seen to be humbled by some of the experiences in which they were initially confident, whereas females had a lower assessment of their personal ability at the beginning of the program. The females were also more challenged by the physical aspects of the program, whereas the males found the relational aspects more difficult (Overholt & Ewert, 2014). Whilst this study did highlight marked differences in

gender outcomes in an outdoor education program, it was a small study (*n*=110) and did not involve adolescents but rather tertiary students who may have varied considerably in terms of age.

Other early studies found similar positive effects for both genders (Hattie et al., 1997). However, Witman (1995) noted a difference in the value of activities, claiming that females valued trust activities, whereas males valued those related to power or dominance. Estes and Ewert (1988) noted that males and females viewed the programs differently and were looking for different outcomes from programs, with females looking for spiritual development, and males for challenge and adventure. Likewise, Cave and Ryan (2007), in a study of backpackers in New Zealand, found that males were predisposed to more extreme adventure activities than females, who were inclined to reflect more on the nature of the activity. In a study of Canadian Outward Bound programs, McKenzie (2003) found that the program had a greater impact on females than males, particularly in respect to interpersonal skills, motivation and self-concept. However, the females in this study had a mean age of 31 and the males 20, which may also have been a significant factor in the study's outcome.

Neill's (1997) critique of outdoor education research studies not reporting gender differences is still valid, even 20 years later. He noted the potential for bias, whereby when discernible difference in outcomes for gender were not evident, results were not reported. He highlighted the importance of gender outcomes being reported, to allow for a greater understanding of program impacts.

In examining the research relating to gender and outdoor education programs, some differences in outcomes were noted, many of which were claimed to be due to different personality and development traits (Cave & Ryan, 2007; Estes & Ewert, 1988; McKenzie, 2003; Neill, 1997; Overholt & Ewert, 2014). It is important that gender differences in outcomes are explored in research in order to inform best practice for outdoor education programs (Booth & Lynch, 2010; McKenzie, 2003; Neil, 1997). When researching gender, it must also be noted that much of the research in outdoor education focuses on women and difference (Neill, 1997). Although theoretical work has moved on from the 'difference' debates, more research is needed, particularly research that focuses on subjective experiences of individuals, rather than treating all people allocated to gender categories as similar.

Residential Education

In Victoria, there are several residential programs, predominately associated with independent schools that cater specifically for Year 9 students. These programs include Marshmead (Methodist Ladies' College), Timbertop (Geelong Grammar), Howqua (Lauriston Girls' College) and Clunes (Wesley College). Some of these programs have been referred to in research (Gray, 1997; Jimenez, 1996; Laughton, 2012; Mcdonough, 2002) as Extended Stay Outdoor Education School Programs (ESOESP), but specific research on the actual programs is fairly limited.

Definition of residential education. Defining the program offered at the SSL appears to be problematic. Despite having some aspects of outdoor education programs, the SSL is not an outdoor education program as such (Margetts, 2010). Whilst the outdoors is a large component of the program, the school encompasses much more than just outdoor learning and expeditions. That being said, neither is the SSL a boarding school. Little of mainstream curriculum is taught and students participate only for a certain time period, as opposed to the majority of their schooling (SSL, 2010-2012). The term alternative education was used by Dyson, Plunkett and Dyson (2010) in their research into the SSL, stating it is a "term broadly used to describe the SSL residential program" (p. 3). This term, however, can conjure up images of education far removed from mainstream, such as Steiner and Montessori programs (Woods & Woods, 2009). While many other terms, such as experiential and residential, could also be used to describe the program, they are too narrow in terms of the educational dimensions covered by the SSL. Some research (Gray 1997, Gray, Patterson & Linke, 1993; Gray & Patterson, 1994; Jimenez 1996, Mcdonough, 2002) has referred to similar programs as Extended Stay Outdoor Education School Program (ESOESPs). However, as previously mentioned, the SSL is far broader than an outdoor education program (Margetts, 2010), so using the term ESOESP would focus too strongly on the outdoor education aspect. Possibly one of the closest terms to describing the program at the SSL is residential schooling. This section examines the evolution of residential schooling internationally and the introduction of residential programs in Australia.

Fleming (1998) traced residential schooling to the first half of the 19th century in Denmark, with the establishment by Grundtrig of the Danish Folk High School, a "school for life" (p. 261). The goals of the Folk High School focussed on the individual and their enlightenment, leading to richer and more rewarding lives for attendees (Houle, 1971).

Although Fleming focussed on adult residential schooling, many of the concepts she attributed to residential schooling could be transferred to adolescent programs.

Since the establishment of the Danish Folk High School (Fleming, 1998; Houle, 1971), the residential experience has taken numerous forms in different countries, varying widely in length, location, and purpose (Fleming, 1998). There are some more well-known examples of residential adult education in the United States, such as the Highlander Folk School in Tennessee founded in 1932 by Myles Horton, and the Kellogg Centres for Continuing Education, established in the 1950s (Houle, 1971), both of which demonstrate the diversity of residential education.

Fleming (1998) developed a framework for residential education using Houle' s (1971) 'characteristics' and Schacht' s (1960) 'advantages', consisting of "(a) detachment from the familiar, (b) personal growth and identity, (c) learning domains and process, (d) impact of time, (e) sense of community and fellowship, and (f) environment" (p. 262). This framework can still be applied to residential and extended stay programs.

In another study, Gray (1997) traced the roots of residential schooling (ESOESPs) to Outward Bound programs both in Europe and Australia. She outlined the importance of educating outside the mainstream classroom and listed a number of aims of ESOESPs, including developing the whole person, strengthening the values of social responsibility and increasing self-esteem and personal capability.

Residential education programs in Australia. Timbertop was the first residential outdoor education school program in Victoria, established by Geelong Grammar near Mansfield in Victoria's High Country (Gray, 1997). Timbertop is a year-long program for Year 9 students. In addition to attending school classes, students participate in a number of outdoor and physical activities, including extended hikes and bush camps. Since Timbertop's inception in 1952, more of these longer term residential schools have been established in Australia, mostly in Victoria. These programs, which all cater for Year 9 students, are all set in rural locations and consist of programs ranging from eight weeks' duration to a school year. The establishment of the SSL was the government school system's first foray into longer term residential education for mainstream students. A number of outdoor camps are available for government school students such as the Outdoor School (formerly known as Bogong Outdoor Education Centre and 15 Mile Creek) (DET, 2011-2016), and a residential program for at risk youth, Typo Station (Australian Camps Association, 2016), however these are very different to the SSL.

The aim of residential programs, according to Gray (1997), was to promote social development, particularly by strengthening the values of social responsibility. This aim was achieved by "providing opportunities to explore individual interests, and develop a range of practical skills beyond those of the normal academic curriculum, and by establishing a climate of cooperative enterprise, of collective challenge" (Gray, 1997, p. 23).

Three studies conducted in Victoria, Australia, investigated extended residential education programs at Year 9 level (Gray, 1997; Laughton, 2012; Mcdonough, 2002). In one, Gray (1997) researched Timbertop, a year-long program, while in the other two, Mcdonough (2002) and Laughton (2012) researched Clunes, an eight week program. Both programs were based in rural settings away from the mainstream school, and included outdoor education activities, environmental studies and a significant emphasis on community living and personal development. They also included some mainstream schooling, in particular the Timbertop program (Gray, 1997; Mcdonough, 2002).

What distinguishes these programs from the SSL is that the students are all from the same school. The large majority of students from a year level cohort attend the programs which form a 'regular' part of the Year 9 school curriculum. Unlike this, the SSL has small cohorts of students from a mix of schools across the state, and attendance could be viewed as extracurricular rather than the 'norm'.

Mcdonough's (2002) research concluded that the program at Clunes had a positive impact upon the self-concept of participants. While participants' concepts of learning underwent change, their understandings of community positively increased and participants demonstrated a shift in language, enabling them to better reflect upon their experiences (Mcdonough, 2002). Laughton's research (2012) showed similar findings about positive development and an increased sense of community, although there seemed to be a lack of community engagement with the Clunes community, which was one of the aims of the program. It was suggested that this may have been due to the relatively short eight week program, which did not give the students nor the town's community enough time to connect. (Laughton, 2012). Gray's longitudinal research (1997) which included a reasonably large sample of 409 students who attended Timbertop, involved studying participants over two years to determine the residual impact of the program up to two years post participation. She used a mixed methods framework and found both intrinsic and extrinsic positive impacts on students from the ESOESP. She did note that the residual impact (two years post program)

was not as strong as the initial impact straight after the program, and particularly declined in the subscales of school spirit and quality of teaching (Gray, 1997).

Gray et al. (1993) also researched a six month program provided in New South Wales by Scots College, Glengarry. They used quantitative data with a control group to determine the effects of the program on participants and found positive development in environmental awareness and social behaviours. Furthermore, these developments were significantly higher than those of the control group, which consisted of students who remained at Scots School and did not attend the program.

Research has also been conducted into the government school program at Typo station, a residential school in North East Victoria, Australia, which caters for at-risk youths (Australian Camps Association, 2016). One Australian research program (Gillespie & Allen-Craig, 2009) investigated the effect of the five-week wilderness program at Typo station on participants' resiliency. It involved surveying the participants before, during and at completion of the program, concluding that the five-week program did impact positively on students' resiliency. It showed that the program "helped at risk participants build upon skills and factors that may help them develop resilience to overcome risks and avoid negative outcomes in the future" (Gillespie & Allen-Craig, 2009, p. 39). However, this research was limited in that it only included 20 participants. Gillsepie and Allen-Craig (2009) pointed out that it should not be used to make generalisations about this program, but as an initial impetus for further research. Whilst some comparisons can be made with the five-week program at the SSL, the students participating were very different and the focus of the program was also quite different. Participants in the Typo research were 'at risk' students whereas students who participated in the SSL were chosen by their schools as students with potential for leadership. The SSL program, whilst having a large outdoor component, also focussed on a larger classroom based curriculum.

Through outdoor education and residential schooling, programs designed to allow for positive personal growth and development have been developed (Hattie et al., 1997; Neill, 2008a). This positive development has now begun to be extended into youth programs and school curricula as an offshoot of positive psychology (Lerner et al., 2005; Roth & Brooks-Gunn, 2003). The following section examines the growth and research into the phenomenon of PYD.

Positive Youth Development (PYD)

Generally speaking, positive (successful) youth development encompasses all our hopes and aspirations for a nation of healthy, happy and competent adolescents on their way to productive and satisfying adulthoods (Roth & Brooks-Gunn, 2000, p. 3).

Background of PYD. Until the last 20 years, development for adolescents tended to be conceptualised in terms of the absence of negative behaviours (Benson, 1997; Lerner, 2007; Lerner et al., 2011) rather than the growth of positive behaviours. However, over the last two decades, an alternative conception of adolescent development or growth has emerged. This perspective is known as PYD, which focusses on the development of strengths believed to exist among all youth (Catalano et al., 2004; Catalano & Toumbourou, 2009; Lerner et al., 2011; Rich, 2003). According to Geldhof et al. (2014b), "PYD is associated across development with positive indicators such as contribution, school engagement, successful intentional self-regulation, and hope" (p. 934). This conceptual framework of PYD was derived from positive psychology (Lerner et al., 2011). The SSL aims to develop positive behaviours in youth, rather than correct negative behaviours (SSL, 2010-2012), therefore the PYD framework has synergies with the philosophy of the school. Importantly this has not been specifically examined in any of the previous research.

Positive psychology is a relatively new phenomenon which is still being developed (Geldhof et al., 2014b; Gilman, Heubner, & Furlong, 2009). Pajeres (2009) noted that positive psychology, as a movement of the late 20th century, is similar to the humanist movement, although positive psychology emphasises scientific theory and methodology in research. Pajeres (2009) conceptualised positive psychology as "the study of human strengths and optimal functioning, and one of its key aims is to foster research on the positive personal traits and dispositions that are thought to contribute to subjective wellbeing and psychological health" (p. 150).

This view of psychology is a move away from the study of the 'deficit' perspective (Catalano & Toumbourou, 2009). Traditionally psychology has been focussed on problems or problem prevention, but positive psychology focuses on developing optimal functioning, regardless of whether problems exist or not. Seligman and Csikszentmihalyi (2000) described the movement as involving,

> valued subjective experiences: well-being, contentment, and satisfaction (in the past); hope and optimism (for the future); and flow and happiness (in the present). At

> the individual level, it is about positive individual traits: the capacity for love and vocation, courage, interpersonal skill, aesthetic sensibility, perseverance, forgiveness, originality, future mindedness, spirituality, high talent, and wisdom. At the group level, it is about the civic virtues and the institutions that move individuals toward better citizenship: responsibility, nurturance, altruism, civility, moderation, tolerance, and work ethic. (p. 5)

In a review of citations in PsychInfo database, Myers (2000) found 21 articles on negative emotions for every one article on positive emotions. Similarly, most research on adolescence has focussed on negative behaviours. One hope is that by studying the best humanity has to offer scholars may learn processes that "may be applied to those currently not living self-actualised or optimally functional lives" (Rich, 2003, p.3).

A review of the literature by Geldhof et al. (2014b) examined the movement of PYD. It was noted that there were few programs and positive personal development measures. Many of the programs were developed for troubled youth, who were displaying negative behaviours. This was referred to as the 'deficit' perspective. Rather than looking at developing positive attributes in young people, programs were seen to fix 'problems' and surveys designed to measure developmental disturbance (Geldhof et al., 2014b). Positive development during adolescence was indexed by absences of or decreases in problems. Bahr and Pendergast (2007) noted that the deficit view of adolescence has been common throughout history, while Roth and Brooks-Gunn (2000) claimed that successful programs view adolescents as resources to be developed.

Roth, Brooks-Gunn, Murray and Foster (1998) defined positive development rather generally, based on the "absence of negative outcomes, as the engagement in prosocial behaviours and avoidance of health compromising and future-jeopardizing behaviours" (p. 426). This definition is possibly too narrow, as it has been found that PYD is not solely isolated from negative behaviours and adolescents may exhibit some but not all the attributes for PYD and still show positive development (Spencer & Spencer, 2014). Steen, Kachorek and Peterson (2002) defined development in a very concrete manner as desirable outcomes, for example school achievement, vocational aspirations, community involvement and good interpersonal relations. Hamilton (2014) defined PYD as a positive orientation that

includes all aspects of development, and, like positive psychology, seeks to illuminate how young people thrive rather than how they fail.

A program such as that offered by the SSL aims to develop leadership and enterprise skills in young people, as well as personal, community and leadership growth (SSL, 2000-2012). Students do not come to the school to have problems fixed, rather to learn new skills and gain independence and confidence to assist them in their transition to adulthood (SSL, 2010a). This aim is closely linked to PYD, once again illustrating the interaction between the school's philosophy and the tenets of PYD.

PYD and outdoor education programs. The positive psychology paradigm has been applied to some research in the field of outdoor education. For example, Gerbers and Morris (2014) outlined the benefits of positive psychology for outdoor education programs. Their view of positive psychology was essentially linked to sustaining a positive mindset and a state of happiness. They noted simple activities, such as writing daily gratitude letters, could increase happiness and hence improve the program. Similarly, Berman and Davis-Berman (2005) asserted that people change for positive reasons when in a supportive community, explaining that such communities are created "when there is an emergence of conditions such as: working with nature, experiencing the outdoors because of an appreciation of the environment, and safety and sharing with a focus on group members' strengths" (p. 18).

The development of supportive communities through outdoor education programs is closely linked to positive development (Berman & Berman-Davis, 2005). Studies by Berman and Davis-Berman (2005) and Wattchow and Brown (2011) both challenged the notion that risk and perceived risk necessarily result in positive outcomes (Ewert & Garvey, 2007; Mortlock, 1987). Wattchow and Brown (2011) noted that this assumes that participants have the capacity to deal with risk, something that may become debilitating and a negative experience for certain individuals (Berman & Davis-Berman, 2005). The suggestion was to provide a safe, secure and nurturing environment that is predictable for positive development (Berman & Davis-Berman, 2005).

Wattchow and Brown (2011) also challenged many traditional notions of outdoor education and experiential learning, arguing that positive development does not always come from exposure to nature and that adventure activities, particularly when contrived, are not necessarily the most successful learning experiences. Transferability from experiential learning does not always occur as a result of experience and reflection and should not be

assumed (Wattchow & Brown, 2011). This supported earlier arguments by Horwood (1987) in relation to residential schooling, and programs that are "rooted in optimistic opinions about the capabilities of the young…the conviction that the young have a desire to be helpful, to have work to do that is of value and is worthy of their best efforts" (p. 87).

Many outdoor education programs marry quite well with the PYD perspective, as the outcomes of outdoor education, as outlined earlier, include development of a positive self - concept and self-efficacy (Berman & Berman-Davis, 2005; Hattie et al., 1997; Neill, 2008a). However, some researchers have questioned whether this link can be made and then transferred (Berman & Davis-Berman, 2005; Brookes, 2003; Wattchow & Brown, 2011). Wattchow and Brown (2011) argued that outdoor education experiences, as they are often delivered, with artificial risk and no sense of place, assume transferability of skills and personal development. Yet there needs to be more than just an experience offered to build positive development. Overall, there appears to be little research globally into how outdoor education programs link with PYD.

Positive youth development programs. Programs catering for adolescents are often viewed as either problem centred prevention programs or PYD programs (Catalano et al., 2004; Catalano & Toumbourou, 2009; Eccles & Gootman, 2002). There is however, much interchangeability between these programs. The SSL program could be viewed as a PYD program, however, it covers aspects of conflict resolution and managing moods and emotions, that would just as easily be included in a so called 'prevention' program (SSL, 2010-2012). Participants attending the SSL would seem to be chosen for their positive qualities and traits, rather than for any negative issues that need to be 'fixed' (SSL, 2010-2012).

The following are some of the features that different authors and researchers have prescribed to PYD programs. It must be noted that many of these features are identical or similar to the features described in the literature as necessary for supporting adolescents and Year 9 students in particular (Bahr & Pendergast, 2007; Bellhouse, 2004; Carnegie Council, 2005; Cole et al., 2006b; Eccles & Gootman, 2002). Roth and Brooks-Gunn (2003) found that features of youth-development programs were:

- Positive and sustained relationships between youth and adults.
- Activities that build important life skills.

- Opportunities for youth to use these life skills as both participants in and as leaders of valued community activities. (p. 107)

Programs having these features were termed youth development (YD) programs (Lerner, 2004; Roth & Brooks-Gunn, 2003).

Calvert et al. (2013) linked programs which build social capital to PYD, defining social capital as the "glue that makes communities work" (p. 5). Social capital is built by programs which foster participant-adult relationships, building strong ties and linking people to organisations. The authors' conceptualisation of social capital was linked so closely to PYD it was almost as if the terms could be interchangeable. Social capital emphasises both individual and community development. Programs that build social capital not only enhance an individual's journey into adulthood, but also benefit society as a whole (Calvert et al., 2013). Within programs such as the one offered by the SSL, projects such as the Community Learning Project (CLP) developed strong links with community and could be seen as building social capital. Calvert et al. (2013) outlined the positive impact on social capital of various community projects undertaken by youth in 4-H programs, which were similar to the Community Learning Projects undertaken by students at the SSL. Calvert et al. (2013) noted that social capital improves if towns devote "their attention, energy and talent to youth-engagement projects since these projects have the potential to strengthen the attachment of youth to the community and opportunities for all citizens to be active and engaged" (p. 41).

Whilst a level of agreement exists in relation to the definition of social capital, measures of it remain varied and subjective, and can be fraught with subjectivity. Australia's Productivity Commission (2003) argued that measures of social capital were 'suggestive' rather than definitive. Enfield et al. (2013) provided an outline of various concepts and ways of operationalising these to measure development in youth programs. The University of Minnesota developed an instrument which measured the constructs of bonding engagement, bonding trust, bridging engagement, bridging trust, linking trust, linking engagement and efficacy (Calvert et al., 2013). Despite developments of measures of social capital, there is not one commonly used instrument.

An examination of theories of well-being by Eccles and Gootman (2002) concluded that the following aspects were required to ensure wellbeing, which in turn promotes positive development:

- A sense of safety and having one's basic physical needs met;
- A sense of social security and attachment—confidence that one's emotional needs will be met (social connectedness);
- A sense of competence and mastery (a sense of personal efficacy and mastery motivation);
- A desire to learn and curiosity about one's world (intrinsic motivation);
- A sense of identity and meaning in one's life (personal and social identities);
- Positive self-regard and general mental health; and
- A positive sense of attachment to social institutions. (p. 70)

They concluded that any program must ensure that these senses and desires are met.

The curriculum framework adopted in Victoria in 2017 (VCAA, 2016) included personal and social development as part of the core learnings. This included students being taught about the importance of regulating emotions, working in teams, and building and maintaining relationships. By including personal and social capabilities as part of the core curriculum, the Victorian education system has recognised the importance of personal development in schooling (VCAA, 2016).

Another comprehensive review of research about youth development programs by Catalano and Toumbourou (2009) concluded that many of the PYD programs did have an impact on features such as social and academic competence, connection, bonding, self-esteem and character. This review, however, only examined extracurricular programs, not programs of PYD provided in a mainstream school curriculum nor in an intense setting such at the SSL. Indeed, much of the research into PYD programs tended to be along these lines.

The work of Lerner et al., (2000) resulted in the creation of a model which demonstrated the interaction of the concepts of Competence, Caring, Connection, Confidence and Character, known as the Five Cs as outcomes of PYD, as illustrated in Figure 2.1.

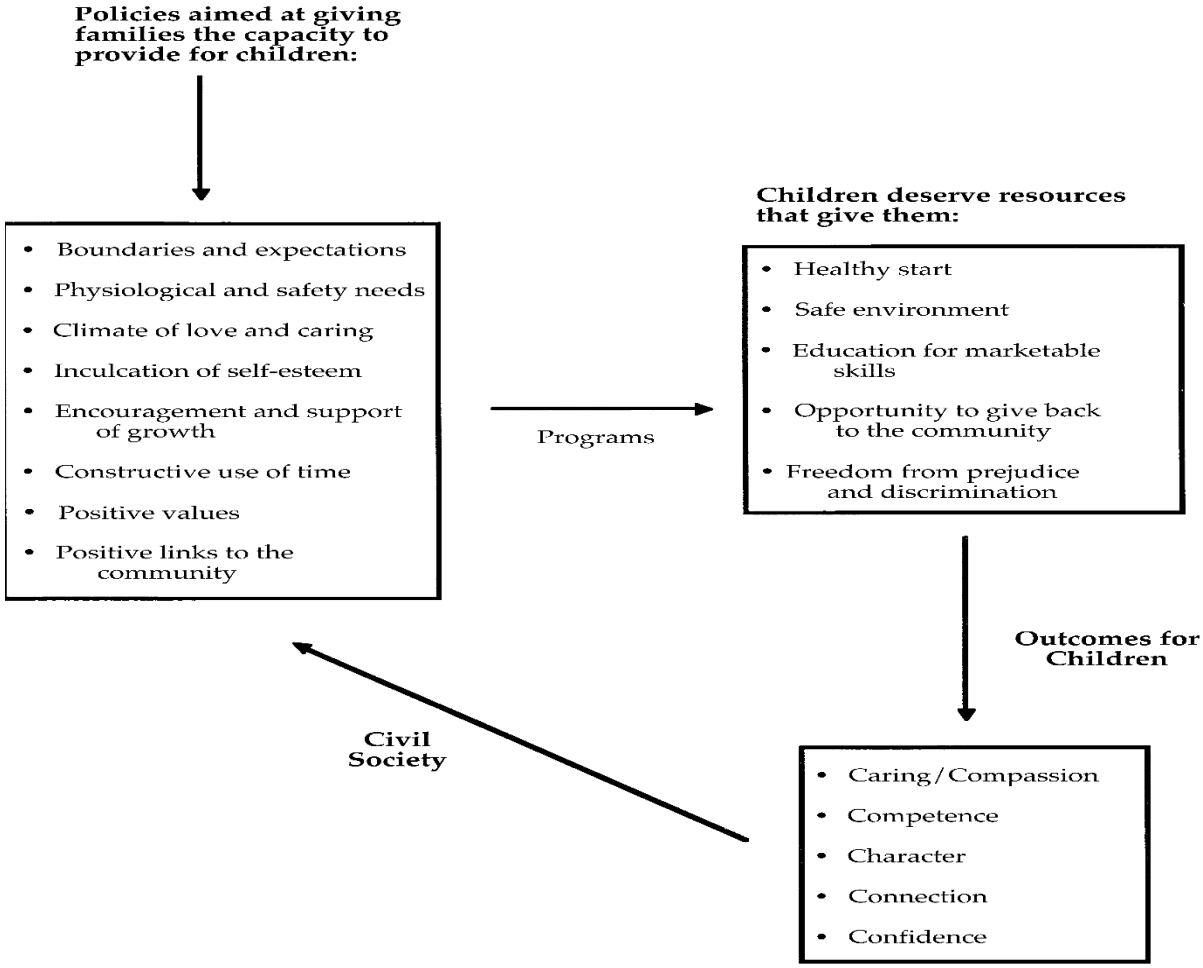

Figure 2.1. The Five Cs of PYD. Reprinted from "Toward a science for and of the people: promoting civil society through the application of developmental science," by R. M. Lerner, C. B. Fisher, & R. A. Weinberg, 2000, Child Development, 71(1), p.16. Copyright 2000 by the Society for Research in Child Development, Inc.

According to Shek et al. (2013), schools need to develop goal directed learning to ensure that students have a strong future belief, and specialised intervention programs such as adventure based counselling can be used to promote PYD. Leadership training and thinking skills are important for the forward flow of positive developmental attributes, as are emotional and cognitive competencies. Bonding was also discussed as crucial in the development of adolescents (Shek et al., 2013).

4-H study of positive youth development. A large ground breaking study relating to PYD was undertaken with the 4-H programs in the United States (Lerner et al., 2011). This study developed a robust instrument which was well tested for validity and reliability to measure PYD. It was therefore important to examine the large scale research undertaken using the Five Cs and the 4-H program.

The 4-H organisation operates in the USA and is responsible for PYD programs (National 4-H Council, 2018). This organisation has existed for over 100 years and provides a range of programs for youth. It began in 1902 in Ohio and Minnesota as 4-H (Kinsey, 2013: 61). The 4-H clubs have a 'learning by doing' or experiential approach. Currently, they have more than 6 million members and a range of delivery modes, including after school programs, school enrichment and camping programs (National 4-H Council, 2018). According to Kinsey (2013), the goals of the 4-H Youth Development Program include, "providing informal educational programs for youth in grades K-13, encouraging responsibility, community awareness and character development in youth, strengthening skills for adults working with youth through publications and training, and improving community partnerships and collaborations" (p. 62). They accomplish their mission through working with adolescents and their families.

The National 4-H Council in the United States sponsored research to determine the effect of youth programs, especially the programs led by 4-H, with regard to positive developmental assets. This model has been developed and undertaken within the 4-H study of PYD (Lerner et al., 2011; Roth & Brooks-Gunn, 2003). The 4-H Study of PYD was a longitudinal study that began in 2002, and continued for a decade, surveying more than 7,000 adolescents from diverse backgrounds across 44 states in the USA. It measured the outcomes and program effectiveness of 4-H programs. Due to the longitudinal nature and large sample size of the research, the constructs used in this 4-H study proved to be reliable and valid constructs (Geldhof et al., 2014a).

Overall, the 4-H PYD study found that youth involved in 4-H programs contributed more to society than youth involved in other programs (Lerner et al., 2013). Participants showed higher levels of active and engaged citizenship, and were found to be four times more likely to contribute to their communities and two times more likely to be civically active (Lerner et al., 2013). The youth involved in 4-H reported significantly higher PYD than youth involved in other out of school programs. They also reported higher academic competence and school engagement and lower risk taking behaviours (Lerner et al., 2013).

However, Spencer and Spencer (2014) noted that a major limitation of the 4-H study was the omission of minority groups of non-white Americans which impacted on generalisability. Lerner et al. (2013) acknowledged that as much as possible, particularly in the first years of data collection, endeavours were made to include a range of participants from different backgrounds. There were also issues with participants leaving the study for

various reasons, however, with such a large sample number of *n*=7000, the results were still very robust.

Measuring positive youth development– the Five Cs. Measuring PYD as suggested by Eccles and Gootman, (2002) is fraught with danger of objectivity and cultural bias. It is important to not prescribe one 'good life' to adolescence based on one set of values or one culture. This particularly becomes important in a cross cultural context (Rich, 2003; Scales et al., 2000). How then to measure these needs in a program to consider whether the program is developing youth positively?

As PYD is a relatively new field, there are only a few well tested empirical methods for measuring the success of a program in terms of PYD. In the 4-H study, Lerner et al. (2011) used a survey instrument to measure the Five Cs of Competence, Confidence, Connection, Character and Caring to determine PYD outcomes. This survey was developed after extensive consultation and research (Lerner et al., 2011; Geldhof et al., 2014a).

Figure 2.2 demonstrates the concepts of the Five Cs and their interaction with PYD.

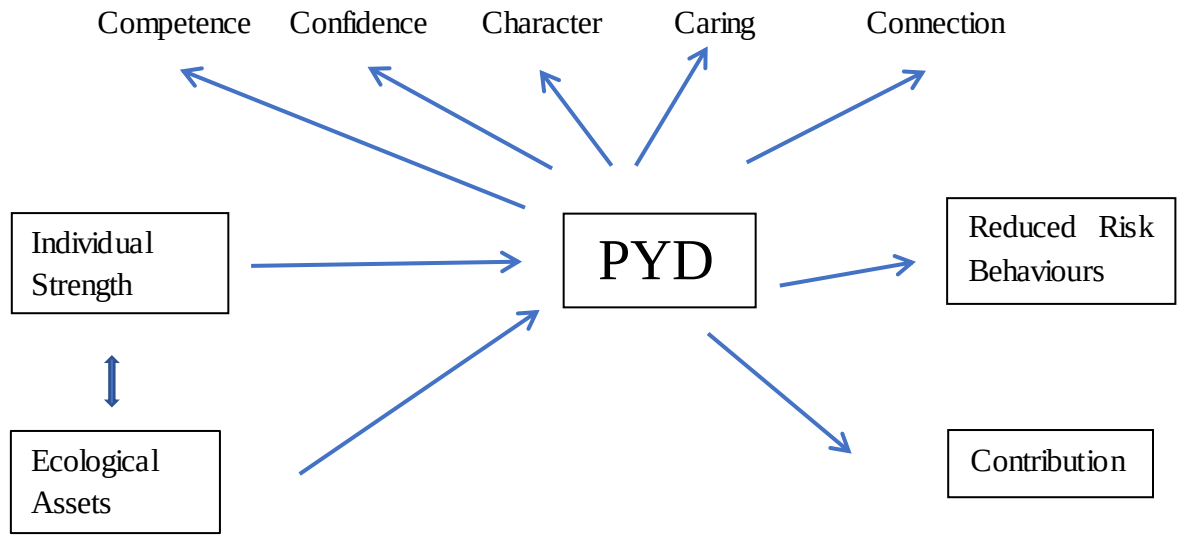

Figure 2.2: The conceptual model guiding the 4-H. Adapted from R. Lerner, 2006, *Promoting positive development among youth* [Lectures].

As demonstrated in Figure 2.2, if development in the Five Cs is found to be present amongst a group of participants, then PYD is apparent. It is from this PYD that contribution, sometimes referred to as the Sixth C (Lerner et al., 2011) results. In addition, risk behaviour

is reduced when PYD occurs. Individual strengths and ecological assets are also required inputs for PYD to be successful (Lerner, 2006).

Initially one of the major goals of the 4-H Study of PYD was to create indexes which would reliably measure positive traits of youth (Lerner, 2005). Little (1993) proposed Four Cs of PYD, namely Competence, Confidence (positive, social), Connection and Character. Eccles and Gootman (2002), Roth and Brooks-Gunn (2003), and Lerner (2005) reviewed these Four Cs and added a Fifth C of Care or Compassion to best understand the goals and outcomes of community-based programs which were aimed at enhancing youth development.

In a meeting of experts in youth development in 2000 consensus was found in the Five Cs as follows:

Competence in academic, social, and vocational areas;

Confidence or a positive self-identity;

Connection or healthy relations to community, family and peers;

Character or positive values, integrity, moral commitment; and

Care and compassion (Roth & Brooks-Gunn, 2000; Eccles & Gootman, 2002).

A survey was then developed to measure each of these (Lerner et al., 2006; Geldhof et al., 2014a). The questions in the survey were developed using a combination of items from existing scales including:

- Profiles of Student Life – Attitudes and Behaviours Survey – PSLAB (Benson, Leffert, Scales & Blyth, 1988)
- Teen Assessment Project – TAP (Small & Rodgers, 1995)
- Self-Perception Profile for Children – SPPC (Harter, 1982)
- Self-Perception Profile for Adolescents-SPPA (Harter, 1988)
- Eisenberg Sympathy Scale –ESS (Eisenberg et al., 1996).
- Empathic Concern Subscale of the Interpersonal Reactivity Index-IRI (Davis, 1980)
- Values in Action Inventory of Strengths for youth – VAI (Peterson & Park, 2006).

Scores for each of the Five Cs were able to be determined from the survey created using items from the above scales (Geldhof et al., 2014a). A PYD score (ranging from 0 to 100) for each participant was computed as the mean of the scores for each of the Five Cs (Competence, Confidence, Connection, Character, and Care, also ranging from 0-100). Higher scores represented higher levels of the Five Cs and therefore, higher levels of PYD (Geldhof et al., 2014a; von Eye, Lerner, Lerner & Bowers, 2011). A shorter version of the

survey was also created (Lerner et al., 2005; Geldhof et al., 2014a) and tested for validity and reliability.

To date there have been few trials of this survey outside the USA and the 4-H program (Conway et al., 2015). Conway et al. (2015) noted this as a significant limitation of the PYD measurement. They administered the survey in Ireland with 672 Irish adolescents. They tested the survey's reliability and validity for use in a European setting, as well as examining the functioning of the survey across genders and found that the PYD model was supported in their study, although there were not homogenous results between genders and there was still a need for more research into PYD in diverse settings.

The Five Cs. Development within this 4-H PYD model was operationalised through the five latent constructs, that is, the 'Five Cs' of PYD, which were then scored (Crocetti, Erentaitė & Žukauskienė, 2014; Eccles & Gootman, 2002; Lerner et al., 2005). Each of the Five Cs was examined as follows:

Competence. Von Eye et al., (2011) noted that "competence is a positive view of one's actions in domain-specific areas including the social and academic domains" (p. 304). Harter (1982) in her work on competence and motivation devised a scale for perceived competence. She broke the concept up into the areas of cognitive competence, social competence and physical competence. Perceived competence referred to one's view of one's abilities, not necessarily actual ability. Cognitive competence referred to academic competence which encompassed school grades, school attendance and decision making. Social competence related to interpersonal competence such as conflict resolution and attaining friendships. Physical competence referred to sporting ability (Harter, 1982). Another domain of competence was vocational competence (Geldhof et al., 2014a) which included employability, work skills and entrepreneurship.

Park and Peterson (2006) noted that competence was defined by a cluster of attributes, abilities and skills, and not simply an absence of deficits. In addition to the previously mentioned competence domains, they added emotional, behavioural and moral competence for adolescents.

Figure 2.3 displays a collation of the different areas of competence as listed by Park and Peterson (2006), Geldhof et al. (2014a) and Harter (1982).

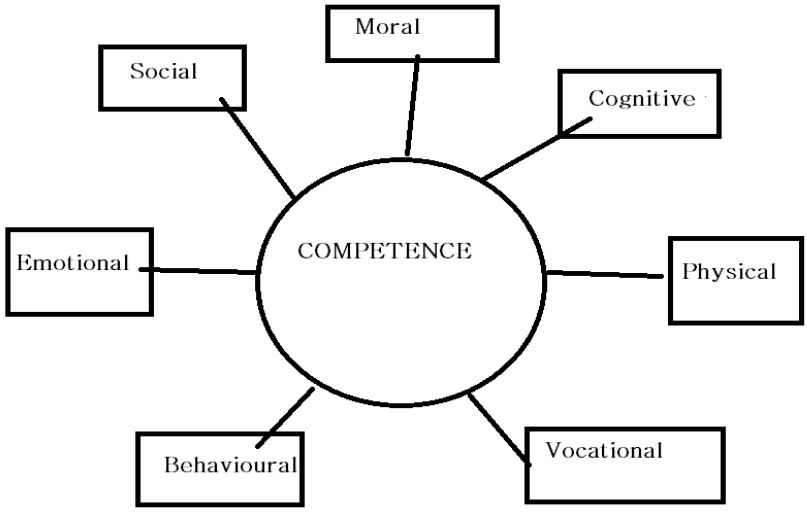

Figure 2.3: Areas of competence.

Competence measured in the 4-H survey took into account social, physical and academic (cognitive) competence (Phelps, 2009).

Confidence. A definition provided for Confidence was "an internal sense of overall positive self-worth, identity, and feelings about one's physical appearance" (von Eye et al., 2011, p. 304). It is a term which could be interchanged with self-efficacy, self-concept or optimism. It differs from Competence, which refers to a perceived ability while confidence relates to a sense of self and identity (Lerner et al., 2005). Bracken (2009) noted that adolescents with a positive self-concept were happier, possessed greater life satisfaction and were better adapted. Harter (1982) espoused that the self is responsible for creating confidence. She said that it could be developed by creating situations where one perceives oneself in an optimistic manner. Confidence used in the 4-H scale was a mix of positive identity and self-worth (Phelps et al., 2009).

Character. Character involves "respect for societal and cultural rules, possession of standards for correct behaviours, a sense of right and wrong, and integrity" (Lerner et al., 2005, p. 23). At the core of PYD is good character (Park & Peterson, 2009), which relates to a well-developed cluster of positive traits, leading to a desire to do the right thing. Scales et al. (2000) and Park and Peterson (2009) listed good character as synonymous with outcomes such as school success, leadership, the valuing of diversity, the ability to delay gratification, overcoming adversity, kindness and altruism. However, there are difficulties with conceptualising and measuring character as it is not always clear what components exactly

make up character. Park and Peterson (2010) discussed character strengths and how to measure these. They found that character strengths strongly correlated with academic success. They also explored links with moral competence and character, thus creating a strong link to competence in other areas.

Peterson and Park (2006) identified character strengths and virtues that transcended cultures, and developed methods to measure these traits. They identified six overarching character strengths as wisdom and knowledge, justice, humanity, transcendence, courage and temperance. Whilst these seem like broad character strengths that may extend between cultures, it is unlikely that these strengths are portrayed in the same way between different cultures and regions. There is still ongoing debate in research circles about whether moral development is the same across cultures (Gibbs et al., 2007). Kohlberg (1981) was a pioneer in this field and developed cognitive stages of moral development with longitudinal studies that pointed to a cross cultural development of morality. It is therefore difficult to determine an empirical measure of Character that transcends cultures. The Character construct examined in the Five C survey is largely conceptualised with Western philosophy and values in mind (Lerner et al., 2005; Roth & Brooks-Gunn, 2003).

Good Character is a highly desirous outcome of PYD programs (Roth & Brooks-Gunn, 2003), yet it is arguably one of the most difficult concepts to define and hence measure. Peterson and Park (2006) developed a survey instrument, the Values in Action Inventory of Strengths for Youth (VAI), to measure character traits to be used by positive development programs. It is from this instrument that some of the questions measuring Character in the Five Cs survey were derived.

Brookes (2003) argued that the character building in which outdoor education programs claim to succeed is a fallacy. He debated that character cannot be changed with single experiences, although perception of character may change. If this theory is to be adhered to, it is dubious whether PYD programs can really build character and create lasting change. However, it can be noted that many of the programs such as the SSL and the 4-H programs are more than just a ‘single experience’.

Character as measured in the 4-H survey includes the dimensions of personal values, social conscience, valuing diversity and conduct behaviour (Phelps et al., 2009).

Connection. Von Eye et al., (2011) defined Connection as a “positive bond with people and institutions that are reflected in healthy, bidirectional exchanges between the individual and peers, family, school, and community in which both parties contributed to the

relationship" (p. 304). Bonding was seen as instrumental in the development of adolescents, particularly connections and bonds that were positive and fulfilling. It is often where connections are negative that the risk taking behaviour of adolescents can lead to negative behaviours (von Eye et al., 2011). This can be seen with the influence of peers and peer group pressure on many youth (Bahr & Pendergast, 2007; Eccles & Gootman, 2002). Hershberg et al. (2014) found that Connection was the most valued of the Five Cs from the own perspective of youth, particularly connection with peers. Connection in the 4-H survey examined Connection with family, community, peer and school (Phelps et al., 2009).

Care. Lerner et al. (2005) defined Care as having a degree of sympathy and empathy for others. Empathy is the ability to feel what others feel, in effect, to stand in someone else's shoes. Gano-Overway et al. (2009) linked empathy with pro-social behaviours and established that empathetic behaviour was negatively correlated with anti-social behaviour. The ability to have empathy for others also, in turn, increases one's self-efficacy, and hence positive development. It is thought that youth who developed empathy were able to better self-regulate their own emotions (Gano-Overway et al., 2009).

Contribution – The Sixth C. When all the Five Cs are demonstrated as developing positively in a young person, the person is said to "thriving" (Gestsdottir, Urban, Bowers, Lerner & Lerner, 2011; Lerner et al., 2005; Scales et al, 2000). Moreover, when these Cs emerge to characterise an adolescent's behaviour, a "Sixth C," that of Contribution, has been found to result. This was explained by Gestsdottir et al. (2011) as involving "actions that add positively to the wellbeing of self, family, community, and ultimately civil society" (p. 64). For instance, Zaff, Boyd, Li, Lerner and Lerner (2010) found that in middle adolescence, Contribution may be represented as active and engaged citizenship.

Identified Gaps in the Literature

Although undertaking a review of the literature provided significant background and information about the SSL program, and its effectiveness, it also highlighted a number of gaps in the research literature. It is from these gaps that the research questions for this study have emerged.

The literature review outlined research that has been conducted into best practice for adolescents and the middle years of schooling. Many of the recommendations emanating from this body of research (Bahr & Pendergast, 2007; Bellhouse, 2004; Carnegie Report, 2005; Cole, 2006a, 2006b; DE&T, 2006; Pendergast & Bahr, 2010) were evident in the curriculum that is used within the SSL program (Margetts, 2010). There is also a large body

of research (Dyson & Cairns, 2001; Dyson & Zink, 2007, 2008, 2009; Dyson, 2009; Dyson & Plunkett, 2010, 2012; SSL annual reports, 2000-2012) that has been conducted into a range of aspects associated with the SSL, which has provided support for the school's effective provision of an engaging curriculum for its students. That body of research illustrates that the school has been able to meet many of the needs of adolescent learners. However, a limitation of the previous SSL research has been the limited focus on longitudinal impacts associated with involvement in the program. The majority of the research, with the exception of one report (Zink & Dyson, 2008) has been undertaken during or immediately after the program experience. There is a need for longitudinal research, which follows up with students at a number of time frames after involvement in the program, to examine whether the positive outcomes reported by students remain into the future or whether they are merely short term gains.

Moreover, none of the existing SSL research has examined the effect of the length of program on the perceived outcomes. This was mainly because the SSL program had always been run in general, with a few exceptions, as a nine-week program. Therefore, no research specific to the SSL exists to determine whether nine weeks is the optimal program length. Indeed, little research in the field of outdoor education or residential education provides any definitive answers to questions regarding optimal time frames. Although some outdoor education studies (Casson & Gillis, 1994; Dillon et al., 2006; Neill, 2009) claimed that longer programs had greater positive effects, there was no succinct definition of what constitutes a 'longer program' and what an optimal program length might be. The SSL program has fitted conveniently into a term, but whether this time frame is the most effective, and whether it allows the most access for students is something which research has not yet answered. Similarly, none of the previous body of SSL research has tapped into gender differences, to examine whether the outcomes for male and female participants might differ. Whilst this is recognised as an important field of research in outdoor education (Neill, 2006), it has not been addressed with regard to the SSL.

PYD has recently emerged as an alternative to the historical deficit view of adolescent development (Benson, 1997; Lerner et al., 2011). Few studies have examined the impact of alternative settings on development in adolescents using a PYD framework (Conway et al., 2015). The 4-H research project (Lerner et al., 2011) was one such study, and as such has provided a useful structure for further research. There has been some research into residential outdoor education programs in Australia and the SSL, but none

within a PYD framework. There is a need for more international research and research in diverse settings utilising the PYD framework (Conway et al., 2015).

The current study will begin to fill these identified gaps. A framework of positive psychology and the research into PYD programs married well with the philosophy and practices of the SSL. An examination of the research on these programs provided direction to this study, and resulted in a greater understanding of the impacts of programs such as the one offered through the SSL.

Development of Research Questions

A review of the literature supported the uniqueness of the SSL both nationally and internationally. There was a dearth of research into the impact of the SSL program post program participation, little research of this nature about similar programs, optimal program length for longer school programs, and the effect of such programs on the different genders. PYD is an ideal aim for alternative residential education programs, and as such, the overarching research question for the current study was developed to frame the investigation into how alternative residential programs, such as the one offered by the SSL, might impact the positive development of the adolescents who attend. In order to answer this question, a number of guiding sub questions were framed.

Research Questions

The overarching research question underpinning the current study was:

How does participation in an alternative residential education program impact on positive youth development in adolescents?

The following sub questions provided the guidance for the study design used to gather evidence to help answer the main research question.

Research question 1

1a. In what ways do students at the SSL perceive their development in relation to the Five Cs model of PYD, namely Character, Competence, Connection, Confidence and Care, directly after their participation in the SSL program?

1b. In what ways do students at the SSL perceive their development in relation to the Five Cs model of PYD, namely Character, Competence, Connection, Confidence and Care, one year after completion of the SSL program?

Research question 2

2a. How do perceptions of development of the Five Cs differ between those participating in the five-week program compared to the nine-week program directly after their participation in the SSL program?

2b. How do perceptions of development of the Five Cs differ between those participating in the five-week program compared to the nine-week program one year after completion of the SSL program?

Research question 3

3a. How do perceptions of development of the Five Cs differ between female and male participants directly after their participation in the SSL program?

3b. How do perceptions of development of the Five Cs differ between female and male participants one year after completion of the SSL program?

Chapter Two Summary

This chapter reviewed the literature relating to the educational and developmental needs of adolescents in the Western World, particularly Australia. It has examined research about outdoor education and the SSL program specifically, and the ways in which programs offered in places such as the SSL aim to assist in the development of young people in a positive manner. Whilst much research has been undertaken in relation to adolescents, theories of PYD structured in a positive psychology paradigm have only recently featured in empirical research. Emerging from this review, a number of gaps in the literature were identified, resulting in the development of a set of research questions to guide the design of a study that could help to fill those gaps. In the next chapter, the methodological approach utilised to design a study to answer the research questions is described.

Chapter Three: Methodology

The methodology utilised in the current study as well as the methods of data collection and analysis undertaken in order to address the research questions are the foci of this chapter. Initially a broad overview of the research paradigm and methodology are presented, then a more specific focus on the methods used to complete the research is explained. This chapter outlines the structure of this research, exploring the options and explaining the final choice for each of the following methodological stages of the study:

- The research paradigm
- The research framework
- The research method – mixed methods
- The research design
- Method for the data collection, tools and analysis

The broad concept of the research paradigm, discussed in the first section, dictated the methodology and research strategies deemed to be most appropriate for the current study. The methodological paradigm chosen was that of constructivism (Grix 2002; Piaget, 1954; Bahr & Pendergast, 2007) as it married well with the research design and framework of applied developmental science (Larsen, 2000; Lerner et al., 2000). The following section describes the theoretical framework for the current study, that of positive youth development (PYD) and applied developmental science (Larsen, 2000; Lerner et al., 2000). Case study was used as a research strategy (Cohen et al., 2011; Yin, 2014). The rationale for the choice of a longitudinal case study as the best fit to answer the research questions is also presented in this section. The research method section describes the rationale for the use of both qualitative and quantitative methods for data collection and analysis (Mackenzie & Knipe, 2006; Tashakkori & Teddlie, 2003; Creswell, 2014). The benefits of using a mixed methods approach are explored, as well as a discussion of the limitations of this methodology. Following this, an explanation of the research design using mixed methods is provided, explaining the concurrent collection of both qualitative and quantitative data, the timing and analysis procedures. Finally, in the last section, the actual method used for data collection and analysis is outlined. The instruments, namely surveys and interviews, are described and justified. The sample and selection of these are described in detail. Ethical considerations are also discussed in this chapter.

Research Paradigm

It is important before undertaking any research to clarify the paradigm underpinning the study (Grix, 2002; O'Toole & Beckett, 2010). The research paradigm is the lens through which the research will be conducted. Without this underlying paradigm, it is easy for research to lose its way. It is also a common error to mistake a paradigm for a research method (O'Toole & Beckett, 2010). Educational researchers use a variety of paradigms to organise how they understand and inquire into social life. It is important for a researcher to acknowledge their ontological and epistemological perspectives when commencing their research (O'Toole & Beckett, 2010). Ontology refers to a person's view of reality, whereas epistemology refers to the meaning ascribed to knowledge and its creation (Darlston-Jones 2007). A range of terminology has been associated with both ontology and epistemology (Grix 2002; Mackenzie & Knipe 2006). Ontology can really be divided into objectivism, where reality is independent of social actors (Cohen, Manion & Morrison, 2011); and constructivism, where reality is influenced and changed by social factors (Grix, 2002). The positivist theory of knowledge aligns with objectivism and interpretivist theory with constructivism (Grix, 2002). Positivist theory lends itself to deductive research methodologies where theory is tested and the observer is separate from the research subjects (Schrag, 1992; Johnson & Onwuegbuzie, 2004). This is largely used for quantitative studies, where empirical data are collected and analysed in order to confirm or reject a hypothesis (Grix, 2002; Cohen et al., 2011). Constructivist theory, on the other hand, lends itself to inductive or grounded research, whereby data are collected to generate a new theory or knowledge (Lincoln & Guba, 2000; Johnson & Onwuegbuzie, 2004). This is largely the method of qualitative research (Bahr & Pendergast, 2007; Grix 2002; Piaget, 1954). Currently, many studies use mixed methods, integrating both qualitative and quantitative methodologies (Creswell, 2014; Johnson & Onwuegbuzie, 2004; Mackenzie & Knipe, 2006; O'Toole & Beckett, 2010; Tashakkori & Teddlie, 2003).

When initially contemplating the current study, the main aim was to discover more about the outcomes and effects of participation in the program at the School for Student Leadership (SSL). Having been exposed to both objectivism and constructivism in my years of previous study, I felt a need to develop a deeper understanding of the outcomes associated with the SSL, which appeared to fit within the constructivist theory paradigm (Bahr & Pendergast, 2007; Cohen et al., 2011; Grix, 2002; Lincoln & Guba, 2000). Rather than focus on a study that was limited to providing empirical evidence about whether or not there were

positive outcomes resulting from participation in the program, I also wanted to look at the program more holistically and to generate new, rich data about the program from my research. As someone with a background in statistics, I do see the value in quantitative methodology, which could be described as positivist (Schrag, 1992). However, for the current study it was determined that a positivist approach was not going to be the best fit for answering the type of research questions that had emerged. Instead, a mixed methods approach would enable more of the student voice to be heard and provide explanations to underpin the results, rather than focussing solely on the reporting of empirical results (Creswell, 2014; Johnson & Onwuegbuzie, 2004). This method also provided the opportunity for triangulation of qualitative and quantitative data, to strengthen the findings (Creswell, 2014: Tashakkori & Teddlie, 2003).

The constructivist paradigm. Ontologically the current study fits within constructivism (Piaget, 1954) as it has features of multiple realities with participants provided an opportunity to interpret and make sense of the SSL program themselves. These perceptions of the program may have changed throughout time and all participants had their own individual view and reality of the program. This became evident in the variety of answers provided in the surveys and interviews. Bahr and Pendergast (2007) noted that the basic tenets for constructivism are that:

- all knowledge is constructed
- cognitive structures are activated in the process of the construction of knowledge
- cognitive structures are under continual development
- purposive activity transforms existing cognitive structures, and
- the environment presses the organism to adapt. (p 113)

Epistemologically the current study conforms to a relational point of view, where knowledge is not just formed objectively in a laboratory, but by engaging participants around a societal context (Larsen, 2000; Lerner et al., 2000). This is strongly associated with applied developmental science, which correlates with PYD (Larsen, 2000; Lerner et al., 2000).

The constructivist lens developed for the current study is depicted diagrammatically in Figure 3.1:

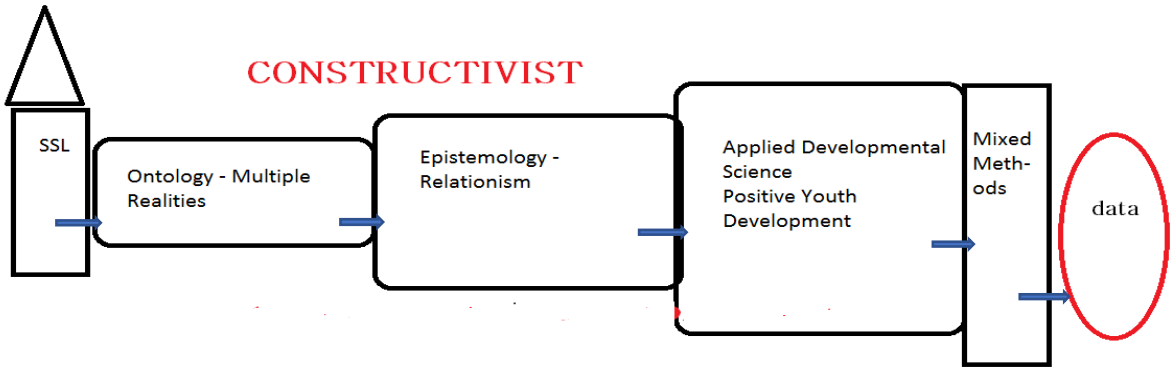

Figure 3.1: The constructivist paradigm underpinning the current study.

The constructivist paradigm is more concerned with gaining an understanding and greater knowledge, rather than examining causal relationships (Cohen et al., 2011; Lincoln & Guba, 2000). It is used when local knowledge is investigated and takes into account different context and values (Lincoln & Guba, 2000). In the constructivist paradigm, the participants in the research are central to the study (Johnson & Onwuegbuzie, 2004). It was deemed as most appropriate for this current study as the aim of the research was to develop knowledge about a program with a variety of participants, and a program in which I have worked. It dealt with a local program, and perceptions of participants were central to the study. Therefore, framing the research methodology around a constructivist paradigm, with a PYD perspective was most suitable for the current study. This perspective and its links with applied developmental society are explored further in the following section.

Research Framework

Applied developmental science and PYD. PYD (Lerner et al., 2000) is part of a larger and growing field of applied developmental science (Larsen, 2000). Gaining an understanding of the fundamentals of applied developmental science also helped relate this research to a constructivist paradigm.

Applied developmental science involves the "synthesis of research and applications to promote positive development across the life span" (Lerner et al., 2000, p. 12). It is concerned with developing programs and interventions that provide for positive development. It is conceptualised by looking at the three terms – applied, development and science and combining them (Lerner et al., 2000). The 'applied' part refers to actions of

families, schools, institutions and policy makers. The 'developmental' part refers to changes within human systems that occur across one's life, which need to take account of differences in cultural and physical settings. The 'science' part refers to the utilisation of a variety of research methods to collect and validate the applied theory (Lerner et al., 2000).

Lerner et al. (2000) noted that programs in themselves can constitute natural experiments, as they are planned interventions. The challenge that follows is developing the science to evaluate these programs. They referred to this as 'applied developmental science' and subsequently developed a theory known as the Five Cs of PYD (Lerner et al., 2000). It is around this theory that this current study was based.

The need to move from efficacy research to outreach research was stressed by Larsen (2000) and Lerner et al. (2000). Outreach research involves not just examining scientifically derived data, but 'reaching out' to the community and using their collective knowledge to further the research knowledge (Fisher & Hamilton, 1998). In other words, determining what works not just in optimal settings, but in real world settings (Fisher & Hamilton, 1998; Lerner et al., 2000). Through this and the use of applied developmental science, Lerner et al. (2000) proposed the ontological view of relationism, which refers to knowledge being derived not only from what experiments show to be knowledge, but also generated in relation to the surrounding context. This constructivist viewpoint acknowledges that knowledge must be formed with regard to its societal context, as explained by Fisher and Hamilton (1998);

> Knowledge that is disembedded from natural or societal contexts (e.g., laboratory-based science) provides only one source of basic knowledge (Bronfenbrenner, 1977). Knowledge that is relational to its context, for example, to the community as it exists in its ecologically valid setting (Trickett, Barone & Buchanan, 1996), is also basic knowledge. In addition, knowledge is not just defined by scientist-derived data. Social/behavioural scientists must learn to integrate what they know with what is known by the community. We believe this view implies that a learning collaboration between scholars and community members must become a part of the knowledge generation process (Eccles, 1996; Erickson & Weinberg, 1998, 1999; Fisher, 1997; Higgins-DÕAlessandro). (p. 3)

In maintaining a constructivist approach, the research conducted for the current study into the SSL involved a number of participants, each with their own perceptions of the program and program outcomes. The research was undertaken within the context of a school program and cannot be viewed without taking into account a number of ever changing variables. It was social research which could not be performed in a laboratory and therefore fitted within the constructivist relationist paradigm (Johnson & Onwuegbuzie, 2004; Lincoln & Guba, 2000). The context of the research was seen to be of vital importance to the genesis of the data and the outcomes of the study (Johnson & Onwuegbuzie, 2004).

Utilising a constructivist paradigm in conjunction with applied developmental science allowed for the use of PYD as an overarching framework for the current study. The research questions were designed around PYD within the SSL program. This framework also led to the use of a case study strategy (Stake, 1995; Yin, 2014), in order for the subject to be studied in depth.

Case study. A case study is a study of a 'particular' (Stake, 1995) or a 'single instance' (Creswell, 2014). It concentrates on one thing, examining it in detail (Thomas, 2011). Stake (1995) explained case study as "the study of the particularity and complexity of a single case, coming to understand its activity within important circumstances" (p. xi). Hart and Nolan (1999) noted that case study is often mistakenly used as a methodology, rather than a method. It is important to acknowledge here that case study is not the methodology for the current study, but it sits within the constructivist methodology as a strategy to be used in the framework for this research.

Case study is used to answer 'how' and 'why' research questions about "a contemporary set of events over which the investigator has little or no control" (Yin, 2014, p. 14). Although not necessarily good for making generalisations, a case study is able to provide a rich picture for research using more than one method (Thomas, 2011). When conducted correctly, case studies can provide an insightful analysis of the research questions (Thomas, 2011). Both qualitative and quantitative methods lend themselves to case studies (Cohen et al., 2011). Indeed, most case studies use a variety of tools to determine answers to the research questions. They can provide rich, contextual data to answer not only the 'how' but the 'why' of research (Cohen et al., 2011; Yin, 2014).

A case study strategy allowed the impact of the SSL program to be studied in depth and holistically using a variety of methods within the constructivist paradigm. In the current case study, the SSL program was the subject. It is important in a case study, that the case has

some boundaries (Stake, 2005), which in the current study were the SSL programs delivered at the Alpine School Campus (ASC) and the Snowy River Campus (SRC) during 2013 and 2014. Although generalisability is often a limitation of case study, and the findings from the current case study are not generalisable to all alternative residential settings, it is still a valuable approach to enable a setting to be examined in detail, and possibly yield explanatory insights and create theory for other settings.

Whilst case studies are able to provide a holistic picture of research, and are strong in terms of reality, they do have some limitations (Nisbet & Watt, 1984; Yin, 2014; Stake, 2005; Flyvbjerg, 2004; Tight, 2010). Case studies may be too subjective and are at risk of observer bias. As previously mentioned, generalisability can also be an issue, whereby results from a case study may not be transferrable to a wider field (Cohen et al., 2011, Thomas, 2011, Flyvbjerg, 2004). There is, however, a move towards analytical generalisation (Cohen et al., 2011) for case study research rather than statistical generalisation (Cohen et al., 2011). Rather than infer results from an experiment onto the general population by repetition of the experiment, case studies can be used to generalise a broader theory which can then be tested by other cases (Cohen et al., 2011; Yin, 2014). However, it can also be argued that, by its nature, social research can never be generalised in the way that many other fields of research can, as humans are unpredictable and cannot be controlled in laboratories (Thomas, 2011). Therefore, generalisation in any social research is often inadequate and should not be seen as a necessity for 'good research' (Thomas, 2011; Flyvbjerg, 2004). Using the SSL as a case study for PYD meant that the results may not be directly applicable to other settings, however, theories and recommendations developed from the research could be useful guides for other settings and further research.

Use of a case study strategy for this current project provided an opportunity for the adoption of a mixed methods approach for data collection and analysis, enabling triangulation of data from various sources (Creswell & Plano Clark, 2011; Guba & Lincoln, 1985). This provided a rich array of data in order to answer the research questions. It was also decided to use a longitudinal approach (Cohen et al., 2011) to the case study.

Longitudinal research. Sometimes termed developmental research (Cohen et al., 2011), longitudinal studies infer an investigation into development over time. Menard (2008) provided a concise explanation of longitudinal research stating that "in longitudinal research data are collected on one or more variables for two or more time periods thus allowing at least measurement of change and possibly explanation of change" (p. 3). There

are still varying conceptualisations of what truly comprises longitudinal research, including the length of time required for research to be termed longitudinal (Hassett & Paavilainen-Mäntymäki, 2013) Indeed, there have been studies ranging from a matter of days to over 100 years which have all been termed longitudinal (Hassett & Paavilainen-Mäntymäki, 2013). Hassett and Paavilainen-Mäntymäki (2013) noted that it is not the length of time that should be subjective to whether a study is longitudinal, but whether there is a need for a study of change over time. They stated that:

> it is quite challenging to set boundaries around a fluid phenomenon. As a result, instead of striving for a particular temporal boundary, such as a range from one minute to infinity, it could be seen as more purposeful to set the boundaries according to the process studies and its natural length, in relation to the research aim of the study and the research tradition of the discipline. (p. 8)

The current study did not take place merely at one point in time, but rather data were collected at three different time points, to allow a theory of development to emerge. This involved tracking the same participants in the study over time, namely at the beginning and end of their participation in the SSL program and one year post program. This enabled investigation of the perceived impact of the program past what is often anecdotally referred to as the 'honeymoon phase', or post-group-euphoria (PGE) (Leather, 2013; Neill, 2006) immediately following involvement. This current study has data from three different time points over a year, a method which connects with the research aim of examining perceptions of the program. A longitudinal research approach allowed these aims to be explored in the current study.

According to Cohen et al. (2011) the appeal of longitudinal studies is the ability to establish causality or make inferences. Longitudinal studies can also combine qualitative and quantitative data (Cohen et al., 2011). Whilst longitudinal research has many benefits, it also presents many challenges for researchers. It is time consuming and can be difficult to administer (Diggle, Liang, & Zeger, 1994). The data collection for the current study took place over three years, which required significant time and effort. Maintaining contact details was crucial to the follow up surveys and interviews (Ware, 1985). There was also the issue of extraneous influences which could have occurred over time and also 'control effect' whereby repeating the survey and interview questions could have desensitised the

participants to the research (Cohen et al., 2011). However, the survey was administered at most three times for each participant, so it would be unlikely that this effect impacted upon the findings.

Sample mortality, which refers to participants in longitudinal research dropping out for various reasons (Cohen et al., 2011), can also be an issue. In the current study, a return rate for the survey of 100% in the initial and second survey administration dropped to a return rate of 55% for the one year post program survey. Data had to be analysed to ensure that those who did not participate in the third data set were not representative of a certain cohort. For example, did all students who found that the program was of no benefit to them not return the survey? It was important that the sample mortality rate was examined analytically to ensure that the data in the longitudinal study was significantly robust.

Case study and longitudinal research were deemed to be appropriate for the research questions developed for the current study. These strategies correlated with the framework of applied developmental science and PYD, which all fell under the umbrella of a constructivist paradigm. From this framework and methodology, the use of a mixed methods framework was deemed the best fit.

Research Methods

Education is a key component of modern society and over time educational research has developed and led to reforms and changes in pedagogy, school systems and curricula (Biesta, 2007; Dimitriades, 2008; O'Toole & Beckett, 2010; Paton, 1990). Educational research has been driven by a number of sources, including government departments of education and practitioners themselves (O'Toole & Beckett, 2010). It has continued to develop using a range of methods and methodologies and there are now volumes upon volumes of educational research. In recent times in the Western World, there has been a push for more evidence based research to be conducted into our schooling system (Biesta, 2007; Freeman et al., 2007). The traditional research, which involves large scale, randomised and experimental research is still highly sought after, particularly by governments (Dimitriades, 2008). However, researchers are also leaning towards more qualitative research as well as mixed methods approaches (Creswell, 2014; Johnson & Onwuegbuzie, 2004; O'Toole & Beckett, 2010; Patton, 1990; Tashakkori & Teddlie, 2003). Some argue that purely evidence based research does not paint the whole picture of the changing reality of society and education (Biesta, 2007; Lincoln & Guba, 2000) whereas others, and in particular some governments, are looking for more concrete evidence upon

which to base their education systems, such as the No Child Left Behind policy in the United States (Dimitriades, 2008). Dimitriades (2008) noted that this policy had been developed by large scale randomised experimentation and quantitative data and had led to major change in the school system in the United States.

Methodology refers to the principles behind knowledge production, particularly in relation to paradigms, whereas research methods refer to the tools or instruments that are utilised in order to collect and analyse data (Mackenzie & Knipe, 2006; O'Toole & Beckett, 2010; Patton, 1990). There are three main research methodologies used in modern educational research, qualitative, quantitative and mixed methods (O'Toole & Beckett, 2010).

Quantitative research concerns itself with theory testing. It is primarily concerned with empirical data and uses a deductive approach (Johnson & Onwuegbuzie, 2000; Schrag, 1992). The validity and reliability of quantitative data arises from statistical analysis and aspects such as sample sizes, sample selection, correlation and standard deviation, which can be measured and analysed (Babbie, 2001). Quantitative research is the standard research in the natural sciences and often the preferred methodology when economic outcomes are riding on research (Dimitriades, 2008). According to Dimitriades (2008), it is the more traditional form of data research and more readily understood and accepted by the general public and governments, at least within the USA.

Qualitative methodology, on the other hand, is a more recent phenomenon in educational research (Creswell, 2014; O'Toole & Beckett, 2010; Patton, 1990; Tashakkori & Teddlie, 2003), and is strongly linked to the constructivist paradigm (Bahr & Pendergast, 2007). It is concerned with a bottom up inductive approach to research, in which the researcher looks for patterns and themes about which to make an inference about the data (Creswell, 2014; Johnson & Onwuegbuzie, 2004). While sometimes perceived as less rigorous than quantitative research, particularly by those who favour the positivist paradigm (Creswell, 2014; Schrag, 1992), qualitative research also uses measures to ensure validity and reliability, such as trustworthiness or credibility, transferability, dependability and confirmability (Lincoln & Guba, 2000; Creswell, 2014). It is often seen as providing richer data than quantitative research, and can contextualise situations, explaining why things happen as they do and providing a more fluid picture of society (Carter & Little, 2007; Creswell, 2014; Patton, 1990).

Recently mixed methodology has gained credibility in the educational research world (Creswell, 2014; Johnson & Onwuegbuzie, 2004; Mackenzie & Knipe, 2006; Tashakkori & Teddlie, 2003). Mixed methods utilise both qualitative and quantitative methods for data collection and analysis (Creswell, 2014). There is an argument that this can make the research unworkable, as mixed methods research combines paradigms that are too different (Howe, 2004; Schrag, 1992). However, others argue that by using both methodologies data can be triangulated and a clearer picture can be painted by the research (Tashakkori & Teddlie, 2003; Creswell, 2014; Mackenzie & Knipe, 2006; Fielding, 2012). It is indeed more difficult for the researcher to use a mixed methods approach as expertise is required into a greater range of methods (Mackenzie & Knipe, 2006).

Knowledge of the methods and methodology can infer adherence to certain paradigms (Johnson & Onwuegbuzie, 2004). There is an argument that certain epistemologies and methodologies are incommensurable with specific methods (Carter, Stacy & Little, 2007) and therefore a researcher's epistemology will necessarily dictate the methods utilised and determine validity and reliability of a study. Whilst a constructivist paradigm, as used in this study, traditionally would lend itself to a qualitative method (Lincoln & Guba, 2000), a case can be made for using a mixed methods approach to data collection and analysis when utilising this paradigm (Johnson & Onwuegbuzie, 2004). There is no necessity for a method to be tied to a paradigm. In fact Patton (1990) advocated a paradigm of choices. Rather than adhering to "methodological orthodoxy" he argued that "methodological appropriatenesss" ensured the best fit for research (p. 39). Both Creswell (2014) and Johnson and Onwuegbuzie (2004), also contested that certain methodologies were not necessarily linked to different paradigms, but in order for research to be fully effective a range of methods and methodologies must be used according to the research question, hence a mixed methods approach.

Mixed methods for the current study. For the current study, a mixed methods approach was considered most appropriate for answering the research questions, as it was suitably compatible with the constructivist paradigm and PYD theory (Larsen, 2000, Johnson & Onwuegbuzie, 2004). Using both qualitative and quantitative data supported the robustness of findings and greater understandings could emerge through triangulated data (Creswell, 2014). Hesse-Biber (2010) emphasised the fact that the use of mixed methods meant words, pictures, and narrative could be used to add meaning to numbers. There was a natural affinity between the positive youth development perspective and mixed methods

(Hamilton, 2014). Almost by definition, achieving a holistic understanding entailed collecting and analysing some unquantified data as well as quantified data (Hamilton, 2014).

Creswell (2014) noted that using both qualitative and quantitative methods allowed for a greater understanding of the research problem. He noted that quantitative research lacked context and participants' voices are not heard, but qualitative research could be deficient due to the personal interpretations made by the researcher and the difficulty of generalising findings to a large group, due to the small number of participants (Creswell, 2014). The strengths of both methods could offset the weaknesses of a single method.

Berman and Davis-Berman (2005) suggested that both qualitative and quantitative studies could support the positive psychology paradigm. They explained that in terms of PYD programs,

> program models should be developed that incorporate the initial assessment of participants. Activities and outdoor modalities should then be chosen to enhance safety, security and the participant's perception of being able to respond well to the program's challenges. Qualitative research should then be conducted that examines the process of creating and fostering an environment in outdoor programs that is supported by the positive psychology paradigm. These kinds of studies would involve asking the participants themselves about the necessary conditions for change. Quantitative studies should then be done to compare programs utilising more traditional models of with approaches built on a positive psychology paradigm to compare both short-term change and the stability of change over time. (p. 20)

A mixed method approach provided a suitable framework for research into PYD and the SSL. For the current study, data required to address the research questions could have been obtained in a number of ways, both through statistics and descriptive data. By using both survey research to collect the quantitative data and ethnographic research (Barbour, 2008), involving interviews for the collection of qualitative data, limitations of each of the methods were minimised. This extended the breadth of the research questions, allowing them not just to be answered, but further explored.

Throughout the research, student voice was seen as being central to the findings (Hart & Nolan, 1999). It was important to ensure that subjectivity was used when collecting

data from the student participants. Research in the past has at times ignored the voice of young people, instead opting for a third party to represent young people, as explained by Mack, Giarelli and Bernhardt (2009),

> In 1998, the National Institutes of Health (NIH) called for increased representation of children and adolescents in research that affects them. Until that time, it was controversial to involve children in research because they are viewed as a vulnerable population (Broome & Richards, 2003). Children were often excluded from studies because investigators and institutional review boards (IRBs) tended to interpret the 1947 Nuremberg Code's requirement of informed consent as implicitly excluding children on the basis of their limited intellectual and emotional capacities. Until the 1960s, IRBs allowed clinical research with children only when the intervention offered a potential benefit over standard therapy, such as in cancer trials. In social sciences research, the views and opinions of children were sought through proxy from parents, teachers, and health care providers (Martin et al., 2006; Neill, 2005). (p. 448)

Current assessments of the potential for children and adolescents to provide an important voice in research are more favourable (Mack et al., 2009). It was important that the data for the current research came directly from the participants as it was their experience and their perceptions which answered the research questions and were central to the constructivist paradigm.

Creswell (2014) also emphasised the importance of the researcher being comfortable with the design method, as well as catering for the audience of the research. My personal background in statistics, having completed an economics degree with a major in econometrics, meant I was fairly comfortable with a positivist standpoint. However, having been involved in education for the past fifteen years, I have become very aware of the value of integrating student voice through using data obtained through interviews and concomitantly, with the constructivist paradigm. Whilst using both qualitative and quantitative data is challenging, a mixed methods approach appeared to be the most appropriate one for finding answers to the current research questions.

Research Design

Mixed methods research design. For the current study, a convergent triangulation design was used where the data were collected concurrently and results of both quantitative and qualitative data were compared and contrasted to create the research findings (Creswell & Plano Clark, 2011). There was no priority given to either the qualitative or the quantitative data. Concurrent qualitative and quantitative studies are used to gain a more robust understanding of qualitative results by integrating quantitative findings to triangulate the research findings and to explore divergent or disparate findings (Fielding, 2012; Hesse-Biber, 2010). Much of the qualitative data were quantified by examining the frequency of coding and utilising theme tables. The data were then used to draw conclusions about the research questions, with the qualitative data adding explanatory statements to the empirical results of the survey data. In this way, a mixed methods approach was used to triangulate the data and validate the findings. Figure 3.2 demonstrates a convergent triangulation design:

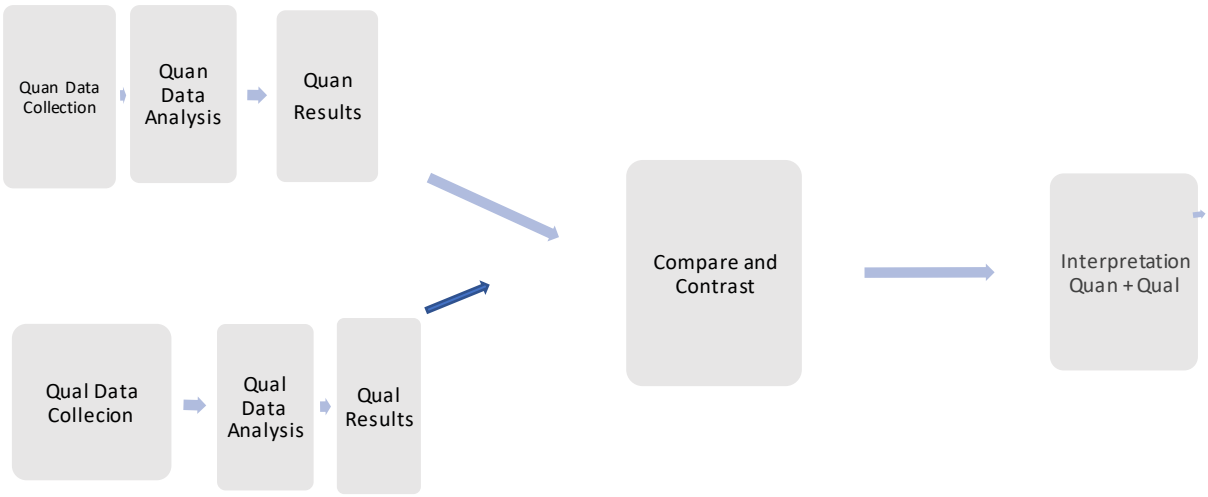

Figure 3.2. Triangulation design: convergence model. Adapted from *Designing and conducting mixed methods research.* (2nd ed.) (p. 63), by J. Creswell, & V. Plano Clark, 2011, Thousand Oaks, CA: Sage Publications. Copyright 2011 by SAGE Publications.

In this model, the qualitative and quantitative data are collected concurrently with equal weighting given to data sources. The results are analysed separately then compared and contrasted during the interpretation phase. The "purpose of this model is to end up with valid and well-substantiated conclusions about a single phenomenon" (Creswell & Plano Clark, 2011, p. 65).

In the current study, the quantitative data were collected at the beginning and end of the program and one year post program. The qualitative data were collected at the end of the program and one year post program (once a completed survey had been received by the researcher). The surveys and interview data were analysed separately, but then triangulated and drawn together in the discussion and findings.

Quasi-experimental design. In keeping with a mixed methods study, a quasi-experimental design was utilised (Cohen et al., 2011), which involved an experiment with some degree of testing, but no control group. It is sometimes referred to as field experimentation or compromise design (Cohen et al., 2011). Whilst use of a control group would have enabled the elimination of extraneous factors to the causality of the results, it was not considered feasible in the current study due to considerations about involving children in research as a control group when the study did not require it. In order to associate the results with participation in the SSL and no other factors, a large sample from two campuses participating in different programs was used.

In the current study, a pre-test, post-test method, using matched paired data, was employed, with the post-test being administered twice to examine longitudinal effects of the program. Whilst this did not totally eliminate the possibility of extraneous factors contributing to the results, the use of qualitative as well as quantitative data enabled the results to be triangulated in order to paint a more holistic picture (Creswell, 2014, Hesse-Biber, 2010).

Eccles & Gootman (2002) when commissioned to investigate community programs in the US noted that,

> A variety of nonexperimental methods, such as interviewing, case studies, and observational techniques, and more focused experimental and quasi-experimental studies are ways to understand and assess these types of community programs for youth. Although the nonexperimental methods tell us less about the effectiveness of particular community programs than experimental program evaluations, they can, when carefully implemented, provide information about the strengths and weakness in program implementation and can be used to identify patterns of effective practice. They are also quite helpful in generating hypotheses about why programs fail. (p.16)

As an experimental design was not feasible due to constraints associated with the study design, this quasi experimental design was chosen to provide insight and explanatory answers to the research questions. This was achieved through use of a research method involving survey instruments and individual and group interviews. These methods are discussed in the next section.

Method - The Data Collection, Tools and Analysis

Following is a discussion of the research method used in the current study. This consists of an explanation of the sample and the tools used to collect the data and the process for analysis of that data.

Sample. All students attending the SSL at the Snowy River campus (SRC) and the Alpine School campus (ASC) in Terms 2 and 4, 2013 and Term 2, 2014 were invited to participate in this research. These students were Year Nine students, aged 14-15 years old. A total of nine programs, with 45 students attending each program were involved.

Although there are three campuses of the SSL, only two campuses were involved in the current study. As the surveys and interviews needed to be completed during the first and last week of the program, it was decided that travel to all three campuses by the researcher would not be logistically possible, particularly due to the large distance between the three campuses. There was also no possibility of an assistant researcher administering the surveys and interviews. As it was, some of the interviews were conducted via video conferencing link ups due to the distance between campuses. However, wherever possible, interviews and surveys took place face to face.

There was a total possible sample of 405 students. Parental permission was obtained for all 405 students. Of these 405 students, eighteen students did not provide individual consent to participate, or chose to participate in the survey but not the interviews. This non-participation was particularly prevalent in two programs, Term 2A and Term 4A at the Alpine School Campus, with six students from each of these terms respectively choosing not to participate. As the sample was large, this non-participation would have had little impact on the results of the study (Cohen et al., 2011). Interestingly, most of these students later expressed disappointment about not being involved when the participating students were completing the surveys and interviews in the final week of the program. An analysis of the reasons for the initial choice of non-participation in the research were beyond the scope and ethical boundaries of this study.

Of the 387 students who agreed to participate and completed the initial survey, a stratified random sample (Babbie, 2001) of between two and six students in each program from each campus participated in individual interviews at the end of term and one year post program. In stratified random samples, subgroups are chosen from the sample whole and then participants chosen randomly, or by chance, from the subsets (Babbie, 2001). It was a stratified sample, as students were selected randomly from gender and school groups. A representation of gender and locality (rural or city) was selected. A further one to two school groups from each program at each of the two campuses participated in the group interviews. This was another stratified random sample, with students from the same school group selected, however a mix each term of city and rural schools was selected. The group interviews took place with only students from the same school in each group.

Table 3.1 shows the number of students invited to be involved in each program.

Table 3.1:

Number of Students Involved in Programs

Term	Length of Program	Snowy River Campus (SRC)	Alpine School Campus (ASC)
2a 2013	5 week	45	45
2b 2013	5 week	45	45
4a 2013	5 week		45
4b 2013	5 week		45
4 2013	9 week	45	
2 2014	9 week	45	45

A total of 270 participants from both campuses were involved in the five week program and 135 students involved in the nine week programs from both campuses. Table 3.2 outlines the number of students who participated in the initial survey, the end of program survey and the 1 year follow up survey from each program.

Table 3.2

Number of Survey Participants

Campus / term	Start	Program End	1 Year after
ASC 2A 2013	39	39	12
ASC 2B 2013	44	44	17
SRC 2A 2013	43	43	17
SRC 2B 2013	44	44	13
ASC 4A 2013	39	39	25
ASC 4B 2013	43	42	24
SRC 4 2013	45	45	27
ASC 2 2014	45	44	16
SRC 2 2014	45	45	21
TOTAL	387	385	172

There were 180 students from the ASC in the five week program and 90 from SRC, and 90 students from SRC in the nine week program and 45 from ASC in this program. These sample numbers were definitely sufficient for quantitative data analysis (Cohen et al., 2011; Onwuegbuzie & Collins, 2007). The qualitative and quantitative samples were all taken from the same target populations and were determined concurrently.

Table 3.3 indicates the number of individual and group interviews conducted in each program at the beginning and end of the term at the school campus. Altogether 22 males and 25 female students participated in individual interviews.

Table 3.3.

Number of Interviews Conducted at the SSL End of Program

Campus / term	Female individual	Male individual	Rural school group	City school group
ASC 2A 2013	2	2	1	
ASC 2B 2013	2	3	1	
SRC 2A 2013	3	3	1	1
SRC 2B 2013	4	5	1	1
ASC 4A 2013	3	2	1	
ASC 4B 2013	2	3	1	1
SRC 4 2013	2	2	1	
ASC 2 2014	2	3		1
SRC 2 2014	2	2		
TOTAL	22	25	7	4

Table 3.4 indicates the number of interviews which took place one year post program.

Table 3.4.

Number of One Year Post Program Interviews

Campus / term	Female individual	Male individual	Rural school group	City school group
ASC 2A 2013		1		
ASC 2B 2013		1	1	
SRC 2A 2013				1
SRC 2B 2013	1	1		1
ASC 4A 2013	2	1		
ASC 4B 2013	1			
SRC 4 2013	1			
ASC 2 2014				
SRC 2 2014	1	1		
TOTAL	6	5	1	2

Instruments. Use of a mixed methods research design allowed for a range of instruments to be used to collect data for the current study (Johnson & Onwuegbuzie, 2004). The instruments and their application were chosen for the range and quality of data they

would provide and the logistics of administration (Babbie, 2001). They included a survey, administered three times, individual interviews and group interviews.

Survey. It was decided to administer a survey to allow for collection of data from a large sample in an efficient manner. This provided the quantitative data for the current study. The instrument used was adapted from the survey used in the 4-H research of PYD (Lerner et al., 2005). This survey measured the Five Cs (Care, Connection Character, Competence and Confidence), which were the key constructs of PYD in the current research. Whilst Geldhof et al. (2014a) noted the existence of a number of measurement models to measure the constructs of PYD, the Lerner and Lerner 5C model is the most commonly used and accepted and has the most construct validity (Geldhof et al., 2014a).

The initial survey used by Lerner et al. (2005) was lengthy (80 + items) and would have been too cumbersome for the current research. It was therefore decided to use the shorter 34 item survey which had been adapted by Geldhof et al. (2014a) in an effort to ensure wider use, due to being less time consuming and onerous for organisations than an 80 item survey. The choice to use the shorter survey was also deemed more appropriate given the age and experience of the students involved. Geldhof et al. (2014a) when developing the survey, used bifactor confirmatory factor analysis (CFA) to analyse all survey items and choose the best fit items for a shorter survey. All items had previously been tested for validity and reliability (Lerner et al., 2005; Geldhof et al., 2014a).

The survey consisted of the demographic questions of name, campus and school term - for data matching purposes and then 34 items related to the Five Cs (see Appendix 2). It was a complex survey in terms of having a range of different response requirements. For instance, the first section had 12 items (6 related to competence, 4 to confidence and 2 to character) which required responses according to the following directions:

> The following pairs of sentences are talking about two kinds of teenagers. I would like you to decide whether you are more like the teenagers on the left side, or you are more like the teenagers on the right side. Then I would like you to decide whether that is only sort of true for you or really true for you and mark your answer

Table 3.5 outlines the number and type of question for each of the five PYD constructs measured by the survey. It also gives an example of a survey item for each construct.

Table 3.5

Survey Constructs and Scales

PYD construct	Number of questions	Scale type	Example of item
Competence	6	'How true is this'	Some teenagers do well at their classwork BUT others do not do well at their classwork
Connection	8	5 point Likert Scale	In my family, I feel useful and important
Confidence	6	5 point Likert Scale (4 questions_ and 'How true is this' (2 questions)	When I am an adult, I'm sure I will have a good life
Character	8	5 point Likert Scale (6 questions) and 'How true is this' (2 questions)	Helping to make the world a better place to live in.
Care	6	5 point Likert Scale	It bothers me when bad things happen to any person.

Due to logistical constraints, it was not possible to conduct a pilot study with the instruments used in the current study. Although this may have been beneficial, the survey instrument has been widely used in the United States in the 4-H study of positive youth development, and its validity and reliability had been robustly tested (Geldhof et al., 2011, 2014a; 2014b). The PYD short survey was also tested in Ireland and the items found to be a good fit to PYD, as explained by Conway et al. (2015):

> Confirmatory factor analyses indicated that in line with previous research (e.g., Lerner et al., 2005), the addition of a number of covariances (i.e., between caring and character; connection to peers and social competence; and connection to family and behavioral conduct) resulted in the Five C's model illustrating an adequate fit to the data (i.e., $Q < 5$; RMSEA < 0.08; CFI > 0.90). The current study also assessed the reliability of the Five Cs model of PYD. In line with previous research (Phelps et al., 2009; Bowers et al., 2010), the total and subscale scores evinced good scale score internal reliability. One exception to this was the competence subscale which illustrated poor internal reliability ($\alpha = 0.45$; 95% $CI = 0.37–0.52$). This suggests that

> scoring on the subscale indicators of social competence, academic competence, and athletic competence did not display consistent inter-item scoring patterns. However, all indicators loaded significantly onto the latent factor of competence (i.e., social competence = 0.64; athletic competence = 0.45; academic competence = 0.52), supporting their inclusion in the model. Furthermore, low internal reliability is often found in scales with a low number of items (Nunnally and Bernstein, 1994), and a high value is not expected when measuring diverse aspects of an overarching construct such as athletic and academic competence (Sijtsma, 2009). Therefore the competence factor was retained. (Discussion, para. 1)

However, Conway, et al. (2015) did find metric and scalar invariance across the genders, particularly relating to the construct of Care. This indicated some gender bias in the survey. They also noted a difference in the mean scoring, with females scoring higher in Care, Connection and Character, and males in Competence and Confidence. Due to this the Conway et al. (2015) suggested a need for further research;

> to clarify the gender differences in a number of indicators. Notably, the results suggest that PYD is not a homogeneous construct for both males and females. Further, work is necessary then to elucidate the underlying factors of PYD that could potentially inform youth programs for both gender groups. Overall, the present findings suggest that the Five Cs model of PYD is a suitable model of positive functioning among adolescents in Ireland, and that this measure is useful and valid in relation to understanding expected relationships with positive and negative developmental indices. ("Limitations", para. 3)

Interviews. To enable the student voice to be heard and the research questions to be explored in depth, individual and group interviews were chosen as a method to gain qualitative data (Babbie, 2001). The reason for having both individual and group interviews was the different dynamics brought by each interview type. Group interviews provide opportunities for participants to bounce ideas off each other, creating valuable data (Morgan,

1997). However, the group situation can also result in non participation which individual interviews alleviate (Morgan, 1997; O'Toole & Beckett, 2010). There is also the risk that the group itself may influence the nature of the data collected (Morgan, 1997). To address this concern, a number of group interviews were conducted to ensure robust trustworthy data. During the data analysis phase the group and individual interviews were examined for any differences in outcomes. This resulted in a lack of differences between the individual and group interviews, hence the data from the interviews were analysed as one data set.

Initial individual interviews were conducted during the last week of term with between two and six students (a mix of boys and girls) randomly selected from students who had consented. The interviews were semi-structured and conducted by myself in a private room at the school campuses. They were recorded and subsequently transcribed. The same students were contacted via mail one year later and respondents were interviewed either via video conferencing, telephone or in person at their home school. Interviews were fifteen to twenty minutes in length. The same process was followed with group interviews, each group consisted of up to six students, all from the same home school. One reason to conduct the group interviews with students from the same school, was the follow-up interview one year post program. The only feasible way to interview the same students as a group was to interview them at their home schools.

It was important to take into consideration the fact that the participants were adolescents not adults, and therefore may have found some of the open ended questions confusing or intimidating (Mack et al., 2009). According to Mack et al. (2009), such questions "call upon emerging cognitive skills such as the ability to think about one's own thoughts or to consider hypothetical situations and the future and the awareness that others may have views different from one's own" (p. 450). For that reason, the interview questions were designed to be clearly understood, using familiar language from the SSL program, and taking into consideration the age group of the participants. A sample of these questions appear in Appendix 3. It was particularly important that a genuine interest in the participants' comments and respect for their thoughts was conveyed, as according to Mack et al. (2009),

> More than for any other age group, engaging adolescents in the research process requires flexibility, constant vigilance to cues from the participant, and a genuine interest in the feelings and ideas of this cohort. The primary tasks for the research

> interviewer are to build rapport, guide the pace of responses, and assure that information is complete and accurate while ensuring that all the rights of the participants are respected. The most effective research interviewers apply developmental concepts to the task, share power, accept unconditionally, and continually evaluate rapport. (p. 451)

The rapport between the participants and myself was important as, although a teacher at the school at the time, I was not directly involved with assessing any of the participants. Confidentiality was emphasised with the participants and it was endeavoured to make them feel included and important to the research.

Data collection. On the day that parents brought their children to the SSL campus to begin their term experience, both the students and their parents were given an explanatory statement about the research project and invited to participate. In addition to this, I spoke to both parents and students at both campuses either in person or via video link to explain the research project. Parents who were willing for their child to participate completed a parental consent form while students completed a separate student consent form. As previously explained, only a small proportion of students chose not to be involved, or to be involved only in the survey.

In Week 1 of the program, the survey was administered by myself in person at one of the campuses and by video conference at the other campus to each of the groups. To ensure consistency, the surveys were all administered during an afternoon session and were completed individually and collected immediately upon completion, by myself at one campus and by a colleague at the other campus. This process was then repeated in the final week (week five OR week nine) of the program at each of the two campuses. Individual and group interviews were also conducted and digitally recorded by myself at both campuses in the same week. These interviews were done in person by myself at both campuses.

One year post program, every student who had agreed to participate was mailed a survey with an explanatory letter regarding this survey and a return paid envelope for return of the survey. After each of the mail outs, with the exception of the initial mail out, liaison teachers from each of the participating home schools, who had also been informed about this research project, were contacted and asked to remind students to complete the survey. The liaison teachers had each previously indicated their willingness to do this, as each of the

home schools were interested in the results about the impact of participation in the program and were particularly keen to discover whether a five week program would be as effective.

Students who had completed individual interviews at the end of the program were mailed a letter inviting them to respond with a suitable time to be contacted for a follow up interview. These interviews were conducted via telephone and digitally recorded. Schools who had been involved in group interviews were also contacted via the school's liaison teacher and interviews were conducted via telephone or video conferencing, or where the school was in proximity to myself, in person.

The data collection schedule is displayed in Table 3.6.

Table 3.6

Data Collection Schedule by Term

Term	2a, 2013	2b, 2013	4a, 2013	4b, 2013	4, 2013	2, 2014
ASC Surveys	Week 1&5	Week 1&5	Week 1&5	Week 1&5		Week 1&9
SRC Surveys	Week 1&5	Week 1&5			Week 1&9	Week 1&9
ASC Interviews	Week 5	Week 5	Week 5	Week 5		Week 9
SRC Interviews	Week 5	Week 5			Week 9	Week 9
Follow up Surveys and Interviews	Term 2, 2014	Term 2, 2014	Term 4, 2014	Term 4, 2014	Term 4, 2014	Term 2, 2015

Sample mortality. Overall, there was a 55% non-return rate of the survey one year post program as outlined in Table 3.2. The return rate improved in the later programs. This could be attributed to the assistance of liaison teachers at the students' home schools, who reminded students to return surveys. The interview sample also underwent a decline in numbers, as outlined in Table 3.4. A number of the students did not respond to requests for a follow up interview. In addition, it proved difficult getting a whole school cohort together for group interviews with some students changing schools, conflicting timetables and non-response from some liaison teachers. To ensure that there was no participant bias in relation to the return of the surveys, statistical analysis was performed and no bias was found.

Data analysis. The data incorporated quantitative data from surveys held at the beginning, conclusion and one year post program, and qualitative data from the group and individual interviews. The surveys were analysed using the statistical software package SPSS23 and the data from the interviews were transcribed then analysed with the software package QSR NVivo10®.

Quantitative data analysis.

Data cleaning. The quantitative data from the surveys were entered into SPSS23 and then data cleaning took place. Four cases with only one data set were excluded. This included three students who did not complete the end of program survey nor the one year post survey and one student who did not complete the initial nor the one year post survey. Reasons for this included early exit from the program and late program arrival.

A number of surveys had missing data. This was sometimes due to participants choosing not to answer specific questions, but when examined in detail it was usually participants incorrectly completing the survey and marking multiple answers on the first page of the survey. Missing data were excluded from the totals for the Five Cs and PYD scores.

As the data were not normally distributed, determining outliers was not possible using traditional methods such as the outlier labelling method (Seo, 2006). Observation of box plots indicated some scores which could be outliers, although closer examination indicated that they were just consistently lower scores rather than outliers, so they were retained to ensure the entire range of data were analysed (Seo, 2006).

Creating scores. The survey instrument was designed so that each item could be coded according to its reference to one of the five constructs; a) Character, b) Confidence, c) Caring, d) Competence or e) Connection (Geldhof et al., 2014a). The items were grouped accordingly and statistical analysis conducted. The survey had been tested for both reliability and validity in previous studies using an in depth process of explanatory factor analysis and bifactor confirmatory factor analysis (Geldhof et al., 2014a; Geldhof et al., 2014b; Lerner et al., 2005). It was also tested longitudinally through a series of invariance tests to ensure the survey remained valid and reliable from Grade 5 to Grade 12 (Geldhof et al., 2014b; Lerner et al., 2005). In order to determine the reliability and validity of the instrument in the SSL setting, both reliability analysis (using alpha coefficient) and confirmatory factor analysis were conducted to ensure that the scales were valid and reliable and measured the stated constructs.

Data from the survey were entered into SPSS23 and a value for each of the Five Cs in each time frame was determined by summing the results for each category. These categories were determined using the method outlined in Geldhof et al. (2014a). In Appendix 2 the category for each question is noted in the survey. Table 3.7 outlines the category of each value:

Table 3.7.

Survey Questions According to Category

Category	Question number
Competence	
Academic	competence 1, competence 4
Social	competence 2, competence 6
Physical	competence 3, competence 5
Confidence	
Self-Worth	confidence 1, confidence 4
Positive Identity	confidence 5, confidence 6
Appearance	confidence 2, confidence 3
Character	
Social Conscience	character 3, character 4
Values Diversity	character 7, character 8
Conduct Behaviour	character 2, character 1
Personal Values	character 5, character 6
Caring	
	care 1, care 2, care 3, care 4, care 5, care 6
Connection	
Family	connection 3, connection 4
Neighbourhood	connection 5, connection 6
School	connection 1, connection 2
Peer	connection 7, connection 8

Note. Adapted from *"PYD-SF Official Report: The creation and validation of short and very short measures of PYD",* by Geldhof et al., 2011, p. 78.

A value for PYD was also calculated. This was the sum of all the data, not including questions about physical competence, social competence and physical appearance, as Geldhof et al., (2014a) found that these "do not attribute a meaningful amount of variance for PYD" (p. 25). Geldhof et al. (2014a, 2014b) argued that rather than just using a higher order construct of PYD, a bifactor analysis, whereby the Five Cs were individually analysed was more powerful. Therefore, in addition to calculating and analysing an overall PYD value, each of the Five Cs was also individually treated as a variable in the analysis for the

current study. This enabled a more distinct picture to emerge of the development of the program participants in the five areas.

Statistical testing. All survey data were initially entered into Excel, then imported into SPSS23 for analysis. Scores were calculated for the Five Cs and PYD as explained in the previous section. Data were then analysed to determine which statistical tests to use in order to most effectively answer the research questions. Paired-samples t-tests and factorial ANOVAs were determined to be the most appropriate tests for this set of data. A t-test is the simplest-test to use to examine the significance of the difference between two means, even if the sample is small (Babbie, 2010; Field, 2005). ANOVA is a statistical tool used to analyse differences between group means (Field, 2005). Paired-samples t-tests were used to measure differences in student responses at each time interval while ANOVA was used to analyse differences between the three time intervals.

In order to run these tests, various assumptions needed to be met (Burns, 2000; Field, 2005), including the assumption of normality, homogeneity of variance, independence of cases, adequate sample size, random sample and continuous or ordinal scale of measurement (Field, 2005). All assumptions were met, with the exception of the assumption of normality. It was decided to still run parametric tests as they have been proven to be robust enough to handle non-normal data (Edgell & Noon, 1984; Glass, Peckham & Sanders, 1972; Harwell et al., 1992; Lix, Keselman & Keselman, 1996). However, non-parametric tests were also conducted and contrasted with the parametric tests, including Wilcoxon Signed Ranks tests (a non-parametric version of paired-samples t-tests) and Friedman's ANOVAs (non-parametric version of ANOVAs) (Field, 2005). While the non-parametric tests produced similar results to the parametric tests, only the parametric test results are reported in the results chapter.

Effect size measures the size of difference between two groups, which according to Coe (2002), is a more valuable measurement of the effectiveness of an intervention than merely reporting statistical significance. Effect size was measured using Cohen's *d* and partial eta squared in order to judge the practical significance of the derived results (Burns, 2000). It was important to use effect sizes to support-tests of significance as sole reliance on significance can limit understanding and applicability of research findings in education practice (Fan 2001; Kotrlik & Williams 2003).

Qualitative data analysis. In order to analyse the qualitative data from the interviews, categories and themes were created (Richards, 2009). Data were coded and then

classified, sorted and arranged. This was a large task due to the amount of interview transcripts, so the software program QSR NVivo10® was utilised to assist. A mix of descriptive, topic and analytical coding (Richards, 2009) was used. The categories for descriptive and topic coding arose from the research questions and literature review, whereas the categories from the analytical coding were derived following initial data analysis. These categories were then analysed for themes. The constant comparative method of analysis was employed for the qualitative data, which allowed theory to be induced (Babbie, 2001). This involved four steps; comparing incidents applicable to each category, integrating categories and their properties, delimiting the theory and writing theory (Glaser &Strauss, 1967).

In analysing the qualitative data, Lincoln and Guba's (1985) trustworthiness criteria were utilised. An audit trail was created and the data were collected over a period of time. This allowed the credibility and dependability of the data to be judged (Lincoln & Guba, 1985). The data were triangulated through concurrent analysis of both the qualitative and quantitative data, investigating, confirming and disconfirming evidence between the two, and examined by peers (Creswell, 2014; Lincoln & Guba, 1985).

Reliability, validity and trustworthiness. The quantitative data was deemed to be valid and reliable as a result of meeting the assumptions required for analysis and through using analytic processes that were appropriate which are explained in detail in the next chapter. Whilst the terms reliability and validity are traditionally associated with quantitative research, qualitative data also needs to be examined for its reliability and validity (Golafshani, 2003). When dealing with qualitative data, terms such as dependability and trustworthiness are more commonly used (Golafshani, 2003; Lincoln & Guba, 1985). More than three decades ago, Lincoln and Guba (1985) set up some parameters, arguing that qualitative data needed to be credible, transferable, dependable and confirmable if it was to be considered trustworthy. The credibility and confirmability of the data can be determined by using triangulation (Guba & Lincoln, 1985), or using a variety of data to validate results. In the current study, numerous interviews were undertaken in different school terms and at different campuses. In addition to this, the qualitative data was compared to the quantitative data, allowing for a comparison and triangulation of the results, which further ensured the credibility and confirmability of the data (Creswell, 2014; Lincoln & Guba, 1985). A "thick description" of data is necessary according to Lincoln and Guba (1985) to ensure the transferability of the data. This involves both the data and the context being described in

detail (Lincoln & Guba, 1985; Ryle, 1949; Geertz, 1973). In the current study, the context is described in detail as are the methods of data collection and analysis, and the findings, so that informed determinations can be made about the potential for transferability. Dependability is assisted via strategies such as external audits (Lincoln & Guba, 1985), and this was supported in the current study through regular discussions about the data with my PhD supervisors, through confirmation panels and higher degree research forums at my university. An audit trail was created and data were collected over a period of time. This enabled the credibility and dependability of the data to be judged (Lincoln & Guba, 1985).

Ethical Considerations

Approval from the Monash University Human Research Ethics Committee (MUHREC), the Department of Education and Early Childhood Development (DEECD) and the School for Student Leadership was obtained. The approval from Monash University was transferred to Federation University during the undertaking of this PhD due to the Gippsland campus of Monash University becoming part of the newly formed Federation University, Australia.

Prior to data collection both students and parents or guardians provided consent to participate in the research, which involved both surveys and interviews. It was important throughout the research to seek the students' permission as well as the parents'. This was due to the fact that adolescents need to feel a sense of autonomy when being involved in research, due to their "heightened sense of self-consciousness and emerging desire for privacy and autonomy" (Mack et al., 2009, p. 453).

As I was employed as a teacher at School for Student Leadership there was a teacher-student relationship between myself as the researcher, and the student participants. Barbour (2008) noted that there can be issues when participants and the researcher are closely involved, particularly in action research:

> Researcher participants, even if they already know a researcher, may feel threatened by having a researcher in their midst. Many qualitative projects, and action research studies in particular, are likely to build into their research designs the potential for comparison. However, for those involved in projects, the fear may be that 'invidious' and unflattering comparisons will be made, which will show them in a bad light. The

> ‘researcher-as-insider’ can then be seen as betraying the trust of her/his peer group. (p. 86)

Barbour (2008) referred to researcher participants in keeping with the use of action research. Although not using action research, some of these issues certainly existed as I was a teacher at the school. In order to offset any risk of fear of comparison or being shown in a ‘bad light’, I ensured all participants were fully aware of anonymity and privacy. I was also not directly involved with teaching the students as I was curriculum coordinator at the time, meaning I was not responsible for any direct assessment, reporting or communication with parents and home school teachers for the student participants. In addition to this, in order to ensure credibility and validity of the research, I ensured that my research was regularly peer debriefed and reviewed (Greene, 2014; Lincoln & Guba, 1985). It was also important to note that there was no effect on my employment as a result of conducting this research, despite being an insider researcher, employed at the SSL.

Participation of students was voluntary and dependent on parental consent, with options for participants to choose not to participate at all or to withdraw at any stage of the research. It was explained that the information provided was anonymous and would have no bearing on student results nor participation in the school program. Due to the nature of adolescents, their limited life experience and issues of competence, informed consent can be difficult to fully understand (Duncan, Drew, Hodgson & Sawyer, 2009). It was important to be very clear with explanations regarding participation and withdrawal options.

Ethics is an important aspect of all research, particularly when working with young people (Alderson & Morrow, 2011; Barbour, 2008; Duncan et al., 2009), so ethical considerations were taken very seriously throughout the project.

Chapter Three Summary

This chapter provided detail relating to the methodological design involved in this research project, which was based around a constructivist paradigm, chosen to support the real life setting of the study, and the emphasis on participant voice being heard (Cohen et al., 2011). The research was concerned with gaining deeper insight and greater understanding of the areas covered by the research questions (Lincoln & Guba, 2000). The unique context and values of the the SSL were taken into consideration in the study design, particularly with the choice of paradigm and the framework of applied developmental science and PYD (Larsen, 2000). A longitudinal case study strategy was utilised (Stake, 2005; Yin, 2014)

incorporating a mixed method approach to data collection and analysis (Johnson & Onwuegbuzie, 2004), the results of which are outlined in the following two chapters.

Chapter Four: Quantitative Analysis and Findings

In this chapter, the findings of the quantitative data analysis are presented. The quantitative data from the surveys were analysed using SPSS23 and the findings are presented separately for each of the research questions. A description of how the surveys were quantified and scored for each of the Five Cs and PYD is provided. The findings are then presented and summarised for each research question.

Initially, the raw survey data were entered and then after some items, which were negatively worded, were reverse coded, a score for each of the Five Cs and an overall PYD score was calculated. The method for this computation was outlined in Table 3.7 in the previous chapter. Research questions 1a, 2a and 3a all used $n = 342$, the number of students who completed the surveys at Times 1 and 2, once the data had been cleaned and surveys with missing results omitted. Research questions 1b, 2b and 3b used $n = 150$, the number of students who completed the surveys at Times 1, 2 and 3, once again allowing for data cleaning.

Internal consistency, construct validity and reliability testing of the survey questions.

Testing for internal consistency, construct validity and reliability of all the items was found to be satisfactory for all three times using Cronbach's alpha, correlation analysis and Principal Component Analysis (PCA).

Cronbach's Alpha – Testing for reliability. Table 4.1 displays the results for testing with Cronbach's alpha over the three time periods.

Table 4.1

Cronbach's Alpha for All Survey Items

	Time 1 (Week 1)	Time 2 (Final week)	Time 3 (12 months post program)
N	34	34	34
Cronbach's alpha	.88	.86	.90

These results indicate an alpha value >.85 for each of the three times the survey was conducted, which represents an acceptable level of internal consistency and reliability for the data (George & Mallery, 2003). This correlates with the average stability correlation of .88 in Lerner's PYD survey (Geldhof et al., 2014b, p. 935).

Testing for divergent validity. In order to test for divergent or discriminant validity of the Five Cs constructs, correlation analysis was undertaken, and the mean correlation value using Pearson's *r* for each of the three times examined. Appendix 5 displays the correlation matrices for the five constructs, Confidence, Competence, Care, Connection and Character at all three time points. Examining all three matrices, it was determined that for Time 1 the mean $r = .310$, for Time 2 mean $r = .278$ and for Time 3 mean $r = .360$. In order for a strong correlation to exist, Pearson's *r* would have to be >.7. All of the mean *r* values indicate a weak to moderate correlation between the constructs of the Five Cs. Therefore, there was discriminant validity for the constructs of the Five Cs, which indicated strong construct validity. Cronbach's alpha, in order to examine the convergent validity, was also calculated for each of the Five Cs and is reported in Table 4.6.

Principal component analysis – testing for validity. Geldhof et al. (2014a) performed extensive work with the PYD survey in relation to its validity. They developed a short form of the survey, which is the one utilised in the current research. The short form was comprehensively examined using exploratory factor analysis and bifactor comparative factor analysis (CFA) to ensure the validity of the survey. Geldhof et al. (2014a) provided clear instructions regarding the calculation of scores for the Five Cs and PYD in the short form. Whilst their research was thorough and extensive, it is important to determine validity of constructs in each situation that the survey is used, particularly in new contexts. Therefore, a Principal Component Analysis (PCA) was conducted in the current study to determine the internal validity of the items in the survey and to identify and compute scores for each of the Five Cs as well as an overarching PYD score.

For Time 1 (Week 1), the factorability of the 34 items was measured and it was found that all items correlated at least .3 with another item. The Kaiser-Meyer-Olkin measure of sampling adequacy was .85, above the recommended value of .6, and Bartlett's test of sphericity was significant ($\chi^2(561) = 5044.69$, $p < .05$). Also, the communalities were all above .3, further confirming that each item shared some common variance with other items. These indicators meant that factor analysis was conducted on all 34 items.

PCA allows for items to be examined for a structure whereby the calculated factors can be loaded onto theoretical entities (Brown, 2009). This then allows calculation of components from the survey for analysis. When this analysis was performed, eight factors with eigen values >1.0 emerged. The eigen values demonstrated that the first factor explained 24% of the variance, the second 13% and the third 6%. The fourth and fifth

factors explained 5% and 4% respectively with the sixth, seventh and eighth explaining less than 4% of the variance each. Both varimax and oblimin rotations were used, and there was little difference established between the two, so it was determined to use an oblimin rotation, allowing for the factors to be correlated (Brown, 2009). Oblique rotation should also be run where there is correlation between factors exceeding .32 (Tabachnick & Fiddell, 2007). This was the case for these factors, with the highest correlation exceeding .32 for the first four factors. This rotation was utilised to examine the eight factors and it was evident from the scree plot that there was a levelling off after the eighth factor. The first eight factors explained a total of 63% of the variance.

Appendix 6 shows the component loadings for each item for Time 1. Each component refers to a particular survey question as noted in Appendix 2. Using Geldhof et al.'s (2011) classifications (displayed in Table 3.7) the eight components examined for Time 1 could be listed as shown in Table 4.2

Table 4.2

Components Identified from Principal Component Analysis and Factors Itemised Time 1

Component	Factors – Survey questions
Confidence	Confidence 1, 2, 3, 4, 5, 6
Care	Care 1, 2, 3, 4, 5, 6
Connection (family, community, school)	Connection1, 2, 3, 4, 5, 6
Character	Character 3, 4, 5, 6
Academic competence/ Conduct & Behaviour	Competence 1, 4, Character 1, 2
Values Diversity	Character 7, 8
Physical competence	Competence 3, 5, 6
Peer Connection/ Social competence	Connection 7, 8, Competence 2

Table 4.2 illustrates a clear marking of the components for Confidence, Care and Connection, although peer connection was separate from school and neighbourhood connection. It was not a big leap to group 'values diversity' and 'conduct and behaviour' with the other factors representing Character. Grouping all the competences together was also the most efficient method for analysing, although it was important that it was recognised that these competencies referred to different things. This is where the qualitative data was able to investigate these areas in more detail.

When determining PYD, the physical and social competencies were not included as Geldhof et al. (2014a) determined that they were not representative of PYD.

Although the PCA did not divide the data into Five Cs, there was justification for the overlap of some components and it was not invalid to group the items in the survey into the Five Cs as suggested in Geldhof et al. (2011):

> When the overlap between individual Cs and PYD is not a problem, researchers can simply aggregate all items that theoretically represent each C, regardless of whether the items loaded onto their respective C constructs in our models. Including items that did not strongly represent the residual C constructs is justified by the fact that those items simply represent the component of each C that is also related to PYD. The resulting scale scores can then be analysed individually or in the presence of a PYD composite score. (p. 29)

The survey items for Time 1 were internally valid when analysed with PCA. It was then important to ensure consistent validity at all three time points, so a PCA was applied for the items of the surveys using Time 2 and Time 3 responses

Performing the same PCA for Time 2 with an oblimin rotation (n = 342) provided very like results to Time 1. Kaiser-Meyer-Olkin measure of sampling adequacy was .813, above the recommended value of .6, and Bartlett's test of sphericity was significant ($\chi^2(561) = 5156.17$, $p < .05$). Also, the communalities were all well above .3, further confirming that each item shared some common variance with other items. The component loadings and commonalities for each item for Time 2 are shown in Appendix 6

The PCA for Time 2 did provide 9 components. The components could all be grouped the same as the components for Group 1, with the exception of Connection 1 and 2. In Time 1 these items are grouped in the Connection component, however in Time 2 they are grouped in their own ninth component. These Connection components relate to connection to school. Using Geldhof et al.'s classifications (2011) (displayed in Table 3.7), the nine components examined for Time 2 could be listed as shown in Table 4.3.

Table 4.3

Components Identified from Principal Component Analysis and Factors Itemised Time 2

Component	Factors – Survey questions
Confidence	Confidence 1, 2, 3, 4, 5, 6
Care	Care 1, 2, 3, 4, 5, 6
Connection to family and community	Connection 3, 4, 5, 6
Character	Character 3, 4, 5, 6
Academic competence/ Conduct & Behaviour	Competence 1, 4, Character 1, 2
Values Diversity	Character 7, 8
Physical competence	Competence 3, 5, 6
Connection to peers / Social competence	Connection 7, 8, Competence 2
Connection to school	Connection 1, 2

The identical PCA analysis was performed for Time 3 (n = 150). Kaiser-Meyer-Olkin measure of sampling adequacy was .791, above the recommended value of .6, and Bartlett's test of sphericity was significant ($\chi^2(561) = 2748.39$, $p < .05$). Also, the communalities were all above .3, further confirming that each item shared some common variance with other items. The oblimin rotation results for Time 3 are in Appendix 6. The factors were slightly different for Time 3 as illustrated in Table 4.4, although they still fitted into the Five Cs. Using Geldhof et al.'s (2011) classifications (displayed in Table 3.7) the nine components examined for Time 2 could be listed as shown in Table 4.4.

Table 4.4

Components Identified from Principal Component Analysis and Factors Itemised Time 3

Component	Factors – Survey questions
Physical confidence	Confidence 2, 3
Care	Care 1, 2, 3, 4, 5, 6
Social Awareness	Character 3, 4
Character, Popularity	Character 1,2,5,6 Competence 6
Connection to family and community and diversity	Connection 3, 4, 5, 6 Confidence 6 Character 8
Physical Competence	Competence 2, 3, 5
Connection to school and race	Connection 1, 2 Character 7
Connection to peers, self-esteem	Connection 7, 8, Confidence 1, 4, 5
Academic competence	Competence 1, 4

Principal component analysis for all three times indicated a reliable fit for the Five Cs to be analysed in the survey as five individual groups.

Quantitative Data Analysis Methods

The data were then analysed to determine whether the ratings provided by students at different times differed in relation to the Five Cs and PYD. To achieve this, paired-samples t-tests and repeated measures ANOVAs and factorial two way repeated measures ANOVAs (Burns, 2000) were used. All statistical tests were performed assuming a significance level of 95% (Field, 2005).

Testing of assumptions. Prior to these tests being performed, a number of assumptions had to be met. These included that the data were randomly and independently sampled, the outcome variables were on an interval or ratio scale, and that the assumption of normality was met (Field, 2005). There was an additional assumption for use of ANOVAs, which is the homogeneity of variance assumption (Burns, 2000).

The data met all criteria except the assumption of normality. After examining skewness and kurtosis and conducting Shapiro-Wilks tests, it was found that some of the data were non-normal. The results of Shapiro-Wilks tests for the data appear in Appendix 7. It could be seen that with $p < .05$, none of the data met the normality assumption.

Performing parametric tests on data which is not normally distributed can increase the occurrence of Type I data errors. Alternatives to this are non-parametric tests (Burns,

2000; Field, 2005). However, these tests lack the power that parametric tests have, and also have their own set of assumptions that must be met (Burns, 2000). Although normality is listed as an assumption for parametric testing, there is evidence that t-tests and ANOVAs are robust enough if the other assumptions are met and can be used even when non-normal distributions exist provided the sample is not extremely small (Glass et al., 1972; Harwell et al., 1992; Lix, Keselman & Keselman, 1996; Edgell & Noon, 1984; Lumley et al., 2002; Vickers, 2005). Therefore, it was decided to continue using parametric tests as they are generally more powerful and allow for effect size to be calculated. However, non-parametric tests (Wilcoxon Signed Ranks tests and Friedman's ANOVAs) were also conducted to ensure that the results from both parametric and non-parametric tests were not discrepant. It was found that the non-parametric results aligned with the parametric results. Therefore, the data analysis in this current study has only reported the parametric findings.

Effect size. For each of the tests where the result was found to be statistically significant, an effect size was calculated. This was determined by using Cohen's *d* test of effect size (1988) for the paired-samples t-tests and partial η2 for the factorial repeated measures ANOVAs. Cohen (1988) interpreted effect sizes to be interpreted as 0.2 is small, 0.5 is moderate and 0.8 is large. Cohen (1988) measured the effect sizes for partial η2 as .01 is small, .06 is moderate and .14 is large.

Response rate. There was a return rate of 45% for the one year post program surveys (n =172). The participant list needed to be examined to ensure that there was no bias within the group that returned the surveys one year post program and those that did not. In order to examine this a factorial repeated measures ANOVA was conducted to compare the results of PYD 1 and PYD 2 for participants who returned the surveys and those who did not. It was decided to use PYD 1 and PYD 2 as they are measures of the overall survey results.

Table 4.5 displays the means and standard deviations for the PYD scores at Time 1 (beginning of the program) and Time 2 (end of the program) for the two groups.

Table 4.5

PYD Scores – Survey Replies

Replied to Time 3	Time	Mean	Standard Deviation
Yes	1	106.21	12.10
No	1	106.00	12.10
Yes	2	110.23	10.90
No	2	108.93	11.35

A statistically significant difference was found between ratings for PYD at the beginning and end of the program $F(1,323) = 55.49$, $p = .000$. There was a small effect size of partial $\eta^2 = .147$. There was, however, no significant effect of whether participants had replied to the one year post program survey on PYD over the two time Times, $F(1,323) = .389$, $p = .533$. It can therefore be concluded that there was no bias in the participants who returned the surveys one year post program and those that did not.

The following section examines results from the quantitative research related to research questions 1a and 1b, which examined the impact on student perceptions of their development of the Five Cs and PYD over the duration of the program and one year post program. This included all student responses, irrespective of whether they completed a five-week or nine-week program. A breakdown of the two programs is dealt with later in relation to research questions 2a and 2b.

Research Questions 1a and 1b – Quantitative Findings

1a. In what ways do students at the SSL perceive their development in relation to the Five Cs model of PYD, namely Character, Competence, Connection, Confidence and Care, directly after their participation in the SSL program?

1b. In what ways do students at the SSL perceive their development in relation to the Five Cs model of PYD, namely Character, Competence, Connection, Confidence and Care, one year after completion of the SSL program?

Reliability testing for the Five Cs. A score for each of the Five Cs was calculated at each of the three time periods as previously outlined in Table 3.7. These scores were then tested for validity using Cronbach's alpha as shown in Table 4.6.

Table 4.6

Cronbach's Alpha for Five Cs and PYD Items

	Time 1	Time 2	Time 3
PYD (N = 28)	.87	.85	.89
Competence (N = 6)	.68	.69	.72
Confidence (N = 6)	.86	.85	.85
Care (N = 6)	.83	.88	.89
Character (N = *8*)	.74	.74	.74
Connection (N = *8*)	.82	.72	.82

These scores were all found to indicate acceptable to high levels of reliability (George & Mallery, 2003). Once reliability was established, paired-samples t-tests for each of the constructs of the Five Cs and PYD were conducted in order to test the hypothesis that there was no difference between the scores at the beginning and end of the program. One way repeated measures ANOVAs were then undertaken to test the hypothesis that the means at all three time points were equal. The means used in the Figures 4.1 - 4.6 are the means when the data from all three time points was used. These means vary slightly to the means when scores from just the first two time points were used, as the sample number is different.

PYD - Quantitative findings for research questions 1a and 1b. PYD was calculated by adding all the scored questions with the exception of questions about physical and social competence and physical appearance (Geldhof et al., 2014a). These scores were found to be reliable for all three times using Cronbach's alpha, as shown in Table 4.6.

As illustrated in Figure 4.1, the mean scores for PYD increased at the end of the program, but then decreased between the end of the program and one year later.

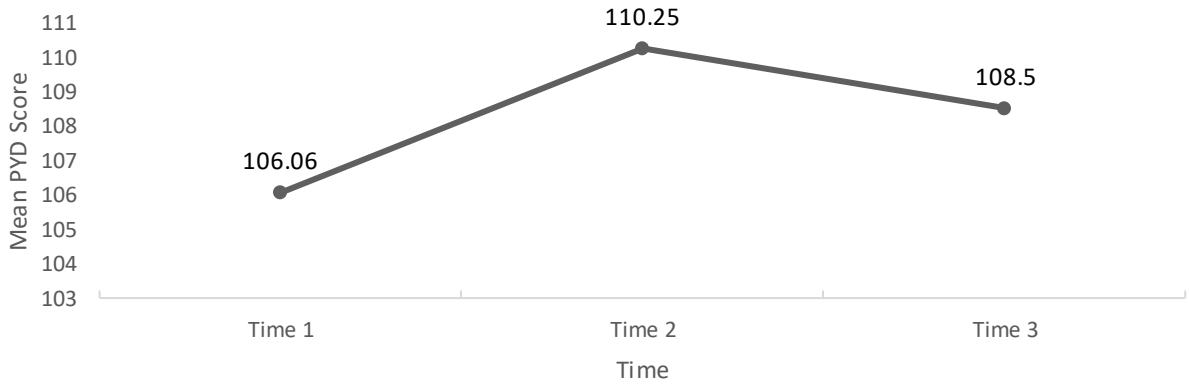

Figure 4.1. Mean PYD scores over three times.

Using a paired samples t-test, it was found there was a statistically significant increase in PYD scores between the first (M = 106.09, SD = 12.08) and last week of the program (M = 109.49, SD = 11.17; $t(324) = -7.36$, $p = .000$). The calculated effect size using Cohen's d was .41 which indicated a small to moderate change in PYD.

A paired samples t-test was then conducted to test the hypothesis that there was no difference between PYD scores at the beginning of the program and one year post program. A statistically significant increase in PYD scores was found between the first (M = 106.06, SD = 12.15) and one year post program (M = 108.5, SD =11.62; $t(141) = -2.71$, $p = .008$). The effect size $d = .23$ indicated only a small change in PYD scores.

When comparing PYD scores at the end of the program (M = 110.25, SD = 10.83) and one year post program (M = 108.18, SD = 11.59), using a paired samples t-test, it was found that there was no significant difference, $t(139) = 2.59$, $p = 0.10$. It should also be noted that the PYD scores decreased in this period.

A one way repeated measures ANOVA was conducted to determine any significant difference in PYD scores over the three survey administrations. As Maulchy's test indicated a sphericity violation, $\chi^2(2) = 11.6$, $p = .003$, degrees of freedom were corrected using Huynh-Feldt estimates of sphericity ($\varepsilon = .93$). The results showed $F(1.9, 244.7) = 12.3$, $p = .000$, which indicated that there was a significant difference between the PYD scores over the three time points, with a small effect size of partial $\eta^2 = .22$.

Competence - Quantitative findings for research questions 1a and 1b. A score for Competence was calculated for all three times. Reliability scores were all within acceptable levels of reliability as shown in Table 4.6. This was a little lower than Geldhof et al.'s (2014b) Cronbach alpha of .80 to .86 for Competence from surveys across Grades 5-12, but still acceptable.

Figure 4.2 displays Competence scores over the three measured time periods.

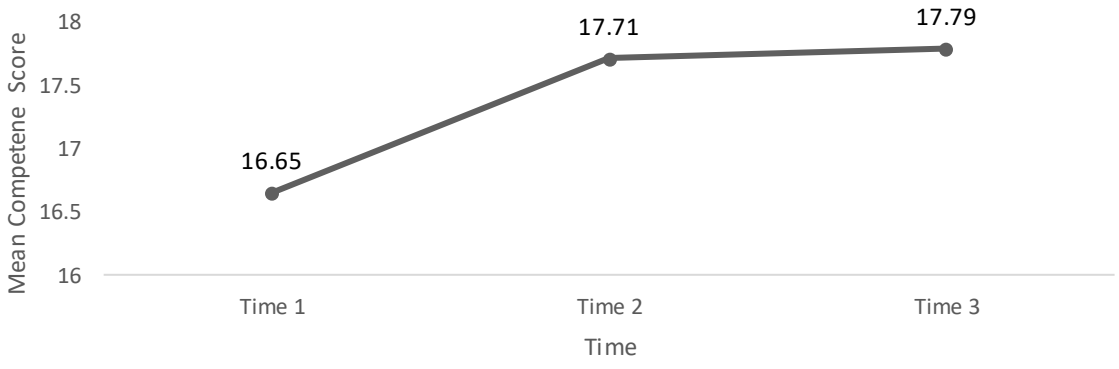

Figure 4.2. Mean Competence scores over three times.

Using a paired samples t-test it was shown that there was a statistically significant increase in Competence scores between the first (M = 17.11, SD = 3.09) and last week of the program (M = 17.86, SD = 2.78; $t(356) = -6.31$, p =.000). The calculated effect size using Cohen's d was d = .34 which indicated a small change in Competence scores.

A paired samples t-test was conducted to examine the difference between Competence scores at the beginning of the program (M = 16.65, SD = 3.04) and one year post program (M = 17.79, SD = 2.98). A statistically significant difference was found between Competence scores with a moderate effect size, $t(157) = -5.144$, p = .000, d = -.41.

Following this a paired samples t-test was used to examine the difference between Competence scores at the end of the program (M = 17.71, SD = 2.77) and one year post program (M = 17.76, SD = 2.97). Results found no significant difference between these scores, $t(156) = -.26$, p = .793.

A one way repeated measures ANOVA was conducted to determine any significant difference in Competence scores over the three times. As Maulchy's test indicated a sphericity violation, $\chi^2(2) = 11.8$, p = .003 degrees of freedom were corrected using Huynh-Feldt estimates of sphericity (ε = .94). The results showed $F(1.88, 286.1) = 17.61$, p = .000, which indicated that there was a significant difference between the Competence scores over the three time points, with a small effect size of partial η^2 = .10.

Confidence - Quantitative findings for research questions 1a and 1b. A score for Confidence was calculated for all three times. Reliability scores were all high, as shown in Table 4.6. This was similar to Geldhof et al's (2014b) Cronbach alpha of .80 to .92 for Confidence from surveys across Grades 5-12.

Figure 4.3 displays Confidence scores over the three measured time periods.

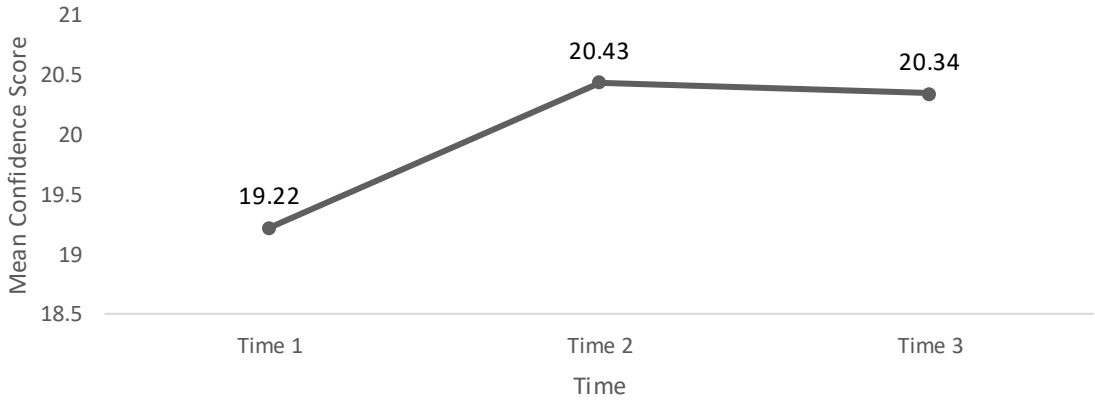

Figure 4.3. Mean Confidence scores over three times.

A paired samples t-test demonstrated a statistically significant increase in Confidence scores between the first (M = 19.26, SD = 3.91) and last week of the program (M = 20.35, SD = 3.40; $t(341) = -7.94$, p =.000). The calculated effect size was d = .43 which indicated a moderate change in confidence scores.

A paired samples t-test was conducted to examine the difference between Confidence scores at the beginning of the program (M = 19.22, SD = 4.08) and one year post program (M = 20.34, SD = 3.33). A statistically significant difference was found between these confidence scores with a small to moderate effect size, $t(141) = -4.41$, p = .000, d = -.37.

A paired samples t-test was conducted to examine the difference between Confidence scores at the end of the program (M = 20.43, SD = 3.15) and one year post program (M = 20.13, SD = 3.41). Results found no significant difference between these scores, $t(147) = 1.16$, p = .248. It should be noted that the scores for Confidence decreased between the end of the program and one year post program.

A one way repeated measures ANOVA was conducted to determine any significant difference in Confidence scores over the three Times. As Maulchy's test indicated a sphericity violation, $\chi^2(2) = 10.10$, p = .006 degrees of freedom were corrected using Huynh-Feldt estimates of sphericity (ε = .92). The results showed $F(1.89, 257.1) = 17.29$, p = .000, with a small effect size of partial η^2 = .11, which indicated that there is a significant difference between the Confidence scores over the three time points, but with a small effect.

Care - Quantitative findings for research questions 1a and 1b. A score for Care was calculated for all three times. Care scores were all shown to have high levels of reliability according to Cronbach's alpha as shown in Table 4.6. This was similar to Geldhof et al's (2014b) Cronbach alpha of .80 to .88 for Care from surveys across Grades 5-12.

Figure 4.4 displays Care scores over the three measured time periods.

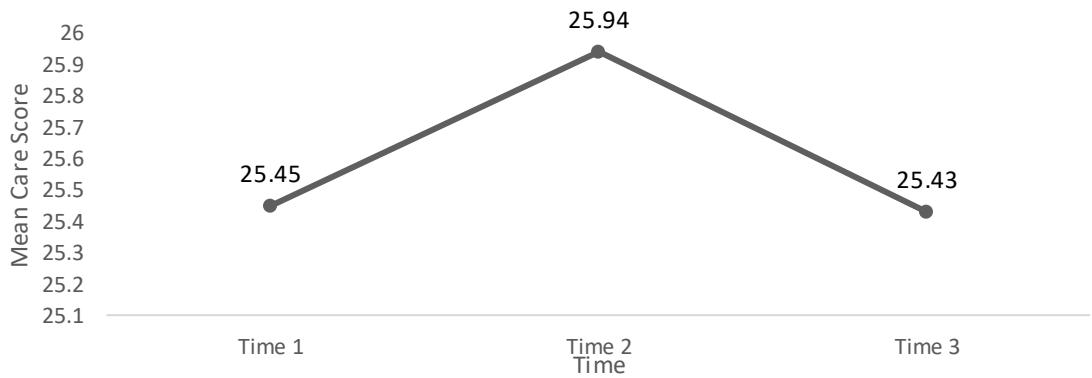

Figure 4.4. Mean Care scores over three times.

Using a paired samples t-test, there was a statistically significant increase in Care scores between the first (M = 25.40, SD = 3.61) and last week of the program (M = 25.79, SD = 3.80; $t(374) = -2.02$, $p = .044$). The calculated effect size was (d) = .10 which indicated a very small change in Care scores.

A paired samples t-test was conducted to examine the difference between ratings for Care at the beginning of the program (M = 25.45, SD = 3.67) and one year post program (M = 25.43, SD = 3.87). It was found that there was no statistically significant difference between these care scores, $t(163) = .04$, $p = 0.965$.

A paired samples t-test was used to examine the difference between care scores at the end of the program (M = 25.94, SD = 3.92) and one year post program (M = 25.41, SD = 3.86). Results found no significant difference between these scores, $t(158) = 1.88$, $p = .063$.

A one way repeated measures ANOVA was conducted to determine any significant difference in Care scores over the three Times. As Maulchy's test indicated a sphericity violation, $\chi^2(2) = 9.39$, $p = .009$ degrees of freedom were corrected using Huynh-Feldt estimates of sphericity ($\varepsilon = .957$). The results showed $F(1.91, 310.14) = 4.72$, $p = .011$, which indicated that there was no significant difference between the Care scores over the three time points.

Character - Quantitative findings for research questions 1a and 1b. A score for Character was calculated for all three times. Character scores were all acceptable levels of reliability as can be seen in Table 4.6. These scores were lower than Geldhof et al's (2014b) Cronbach alpha of .89 to .93 for Character from surveys across Grades 5-12, but still acceptable.

Figure 4.5 displays Character scores over the three measured time periods.

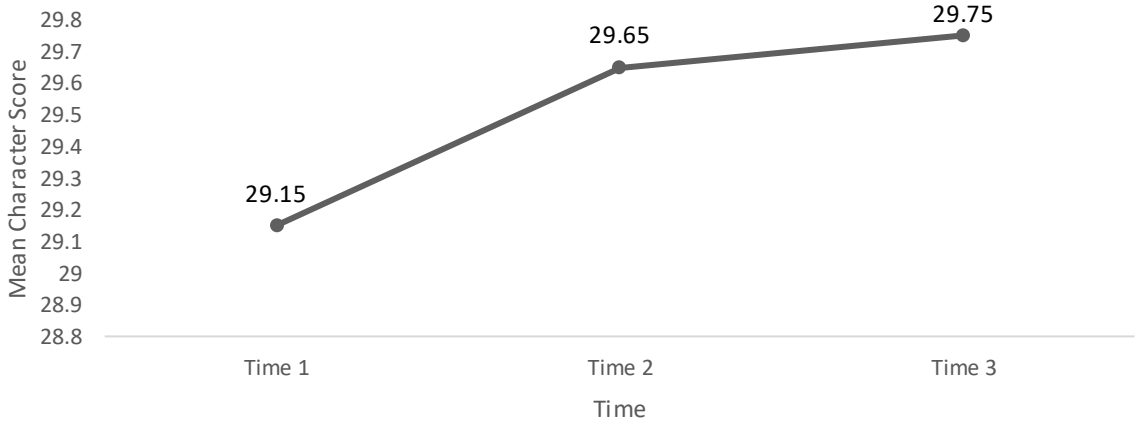

Figure 4.5. Mean Character scores over three times.

A paired samples t-test indicated that there was a statistically significant increase in Character scores between the first (M = 29.03, SD = 4.37) and last week of the program (M = 29.60, SD = 4.27; $t(358) = -2.85$, p=.005). The calculated effect size of d = .15 indicated a very small change in Character scores.

A paired samples t-test was conducted to examine the difference between Character scores at the beginning of the program (M = 29.15, SD = 4.35) and one year post program (M = 29.75, SD = 4.15). It was found that there was no statistically significant difference between these scores, $t(155) = -1.92$, p = 0.57.

Then a paired samples t-test was used to examine the difference between Character scores at the end of the program (M = 29.65, SD = 3.99) and one year post program (M = 29.67, SD = 4.14). Results found no significant difference between these scores, $t(152) = -.044$, p = .965.

A one way repeated measures ANOVA was conducted to determine any significant difference in Character scores over the three Times. Maulchy's test indicated that the sphericity was met (p = .501). The results showed $F(2) = 2.816$, p = .061, which indicated that there was no significant difference between the Character scores over the three time points.

Connection - Quantitative findings for research questions 1a and 1b. A score for Connection was calculated for all three times. Connection scores all displayed high levels of reliability as shown in Table 4.6. These were lower than Geldhof et al's (2014b) Cronbach alpha of .89 to .92 for Connection from surveys across Grades 5-12, but still acceptable.

Figure 4.6 displays Connection scores over the three measured time periods.

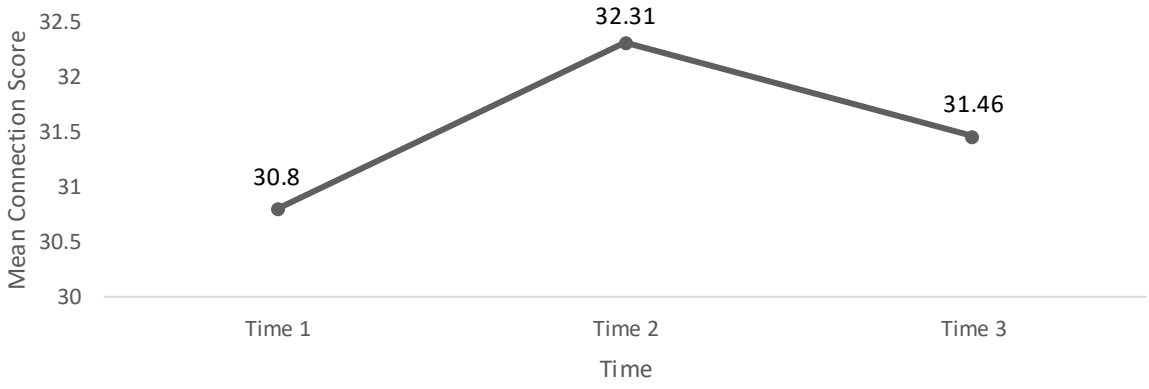

Figure 4.6. Mean Connection scores over three times.

A paired samples t-test indicated that there was a statistically significant increase in Connection scores between the first (M = 31.07, SD = 5.06) and last week of the program (M = 32.43, SD= 4.77; $t(364) = -6.80$, p=.000). The calculated effect size of d= .36 indicates a very small to moderate change in Connection scores.

A paired samples t-test was conducted to examine the difference between Connection scores at the beginning of the program (M = 30.8, SD = 5.17) and one year post program (M = 31.46, SD = 4.65). It was found that there was no statistically significant difference between these scores, $t(161) = -1.67$, p = 0.098.

Finally, a paired samples t-test was used to examine the difference between Connection scores at the end of the program (M = 32.31, SD = 4.6) and one year post program (M = 31.43, SD = 4.66). Results found a statistically significant difference between these scores, $t(159) = 2.47$, p = .016 with a small effect size, d = .19. As scores decreased between the end of program and one year post program, this was a negative effect.

A one way repeated measures ANOVA was conducted to determine any significant difference in Connection scores over the three times. As Maulchy's test indicated a sphericity violation, $\chi^2(2) = 24.82$, p = .000, degrees of freedom were corrected using Huynh-Feldt estimates of sphericity ($\varepsilon = .88$). The results showed $F(1.76, 276.56) = 8.62$, p = .000, with a small effect size of partial $\eta^2 = .05$, indicating a significant difference between the Connection scores over the three time points, but with only a small effect.

Summary of quantitative findings for research questions 1a and 1b. There was found to be a statistically significant difference for all the Five Cs and PYD from the beginning to the end of the program. Most of these effects were small to moderate effects. However, when all three time points were compared, only PYD, Competence, Confidence and Connection were found to have a statistically significant difference, all with only small effect sizes. The constructs of Care and Character were not found to have an effect over the three time points. PYD, Competence and Confidence had a statistically significant difference from the beginning of the program to one year post program, but the same was not found for Care, Character and Connection. The only component to have had a statistically significant difference between the end of the program and one year post program was Connection, with a very small effect.

Table 4.7 provides a summary of the findings for questions 1a and 1b.

Table 4.7

Summary of t-tests and ANOVA Results for Research Questions 1a and 1b

	ANOVA *p* value – three time points	Beginning and end of program *p* value	Beginning and one year post program *p* value	End of program and one year post program *p* value
PYD	.000 (partial $\eta^2 = .22$)	.000 (*d* = .41)	.008 (*d* = .23)	.10
Competence	.000 (partial $\eta^2 = .10$)	.000 (*d* = .34)	.000 (*d* = .41)	.793
Confidence	.000 (partial $\eta^2 = .11$)	.000 (*d* = .43)	.000 (*d* = .37)	.248
Care	.011	.044 (*d* = .10)	.965	.063
Character	.061	.005 (*d* = .15)	.57	.965
Connection	.000 (partial $\eta^2 = .05$)	.000 (*d* = .36)	.098	.016 (*d* = .19)

The next section includes findings from analysis of the quantitative data in relation to research questions 2a and 2b, relating to differences between the five and nine week program.

Research Question 2a – Quantitative Findings

2a. How do perceptions of development of the Five Cs differ between those participating in the five-week program compared to the nine-week program directly after their participation in the SSL program?

PYD – Quantitative findings for research question 2a. Table 4.8 lists the means and standard deviations for the PYD scores at Time 1 (beginning of the program) and Time 2 (end of the program) for the five and nine-week programs.

Table 4.8

PYD Scores by Program Length at Beginning and End of Program

Program length	Time	Mean	Standard Deviation
5	1	106.79	12.03
9	1	104.74	12.13
5	2	109.70	11.01
9	2	109.09	11.48

A Factorial repeated measures ANOVA was conducted to examine the effect of the length of the program on the PYD scores at the end of the program, with no significant effect of length of program on PYD scores found over the two times, $F(1,323) = 1.10$, $p = .297$.

Competence– Quantitative findings for research question 2a Table 4.9 displays the means and standard deviations for the Competence scores at Time 1 (beginning of the program) and Time 2 (end of the program) for the five and nine-week programs.

Table 4.9

Competence Scores by Program Length at Beginning and End of Program

Program length	Time	Mean	Standard Deviation
5	1	16.65	3.23
9	1	17.56	3.06
5	2	17.35	2.99
9	2	18.02	2.61

A factorial repeated measures ANOVA was conducted to examine the effect of the length of the program on the Competence scores at the end of the program. There was found to be no significant effect of length of program on Competence scores over the two times, $F(1,355) = 3.69$, $p = .056$.

Confidence – Quantitative findings for research question 2a. Table 4.10 displays the means and standard deviations for the Confidence scores at Time 1 (beginning of the program) and Time 2 (end of the program) for the five and nine-week programs.

Table 4.10

Confidence Scores by Program Length at Beginning and End of Program

Program length	Time	Mean	Standard Deviation
5	1	19.50	3.95
9	1	18.81	3.81
5	2	20.50	3.24
9	2	20.08	3.69

A Factorial repeated measures ANOVA was conducted to examine the effect of the length of the program on the Confidence scores at the end of the program. No significant

effect of length of program was found on Confidence scores over the two times, $F(1,340) = 2.02$, $p = .156$.

Care – Quantitative findings for research question 2a. Table 4.11 displays the means and standard deviations for the Care scores at Time 1 (beginning of the program) and Time 2 (end of the program) for the five and nine-week programs.

Table 4.11

Care Scores by Program Length at Beginning and End of Program

Program length	Time	Mean	Standard Deviation
5	1	25.60	3.49
9	1	25.38	3.83
5	2	25.68	3.77
9	2	25.99	3.85

A factorial repeated measures ANOVA was conducted to examine the effect of the length of the program on the Care scores at the end of the program. No significant effect of length of program on Care scores over the two time times was found, $F(1,373) = .026$, $p = .872$.

Character – Quantitative findings for research question 2a. Table 4.12 displays the means and standard deviations for the Character scores at Time 1 (beginning of the program) and Time 2 (end of the program) for the five and nine-week programs.

Table 4.12

Character Scores by Program Length at Beginning and End of Program

Program length	Time	Mean	Standard Deviation
5	1	28.90	4.49
9	1	29.28	4.17
5	2	29.41	4.39
9	2	29.95	4.03

A factorial repeated measures ANOVA was conducted to examine the effect of the length of the program on the Character scores at the end of the program. No significant effect of length of program on Character scores over the two time times was found, $F(1,357) = 1.19$, $p = .277$.

Connection - Quantitative findings for research question 2a. Table 4.13 displays the means and standard deviations for the Connection scores at Time 1 (beginning of the program) and Time 2 (end of the program) for the five and nine-week programs.

Table 4.13

Connection Scores by Program Length at Beginning and End of Program

Program length	Time	Mean	Standard Deviation
5	1	31.43	4.91
9	1	30.40	5.29
5	2	32.68	4.77
9	2	31.97	4.75

A factorial repeated measures ANOVA was conducted to examine the effect of the length of the program on the Connection scores at the end of the program. No significant effect of length of program on Connection scores over the two time times was found, $F(1,363) = 3.10$, $p = .079$.

Summary of quantitative findings for research question 2a. There was found to be no statistically significant difference for any of the Five Cs nor for PYD due to program length.

The next section examines the impact of program length one year post-program participation, by utilising factorial repeated measures ANOVAs. The means and standard deviations for PYD and each of the Five Cs for the different program lengths and at all three time points are displayed in Tables 4.14 - 4.19. The means are different than those displayed in Tables 4.8 - 4.13 as the sample numbers are considerably different.

Research Question 2b – Quantitative Findings

2b. How do perceptions of development of the Five Cs differ between those participating in the five-week program compared to the nine-week program one year after completion of the SSL program?

PYD – Quantitative findings for research question 2b. Table 4.14 shows the means and standard deviation for PYD at the three time points, Time 1 being the start of the program, Time 2 the end of the program and Time 3 one year post program for the five and nine-week programs.

Table 4.14

PYD Scores by Program Length at Three Time points

Program length	Time	Mean	Standard Deviation
5	1	106.78	12.17
9	1	106.00	12.49
5	2	109.91	10.04
9	2	111.75	11.90
5	3	108.51	12.27
9	3	108.85	10.73

A factorial repeated measures ANOVA was conducted to examine any effect on PYD scores due to program length. As Maulchy's test indicated a sphericity violation, $\chi^2(2) = 12.43$, $p = .002$ degrees of freedom were corrected using Huynh-Feldt estimates of sphericity ($\varepsilon = .94$). No statistically significant difference for PYD scores due to the length of the program was found, $F(1,130) = .07$, $p = .798$.

Competence – Quantitative findings for research question 2b. Table 4.15 shows the means and standard deviation for Competence scores at the three time points for the five and nine-week programs.

Table 4.15

Competence Scores by Program Length at Three Time points

Program length	Time	Mean	Standard Deviation
5	1	16.95	2.90
9	1	16.29	3.29
5	2	17.83	2.65
9	2	17.39	2.98
5	3	17.94	2.83
9	3	17.49	3.21

A factorial repeated measures ANOVA was conducted. As Maulchy's test indicated a sphericity violation, $\chi^2(2) = 11.74$, $p = .003$, degrees of freedom were corrected using Huynh-Feldt estimates of sphericity ($\varepsilon = .93$). No statistically significant difference for Competence scores due to length of program was found, $F(1,151) = 1.45$, $p = .231$.

Confidence – Quantitative findings for research question 2b. Table 4.16 shows the means and standard deviation for Confidence scores at the three time points for the five and nine-week programs.

Table 4.16

Confidence Scores by Program Length at Three Time points

Program length	Time	Mean	Standard Deviation
5	1	19.46	4.11
9	1	18.54	3.86
5	2	20.86	2.79
9	2	20.15	3.56
5	3	20.58	3.05
9	3	19.85	3.76

A factorial repeated measures ANOVA was conducted. As Maulchy's test indicated a sphericity violation, $\chi^2(2) = 10.05$, $p = .007$, degrees of freedom were corrected using Huynh-Feldt estimates of sphericity ($\varepsilon = .93$). No statistically significant difference for Confidence scores due to the length of the program was found, $F(1,135) = 2.23$, $p = .138$

Care – Quantitative findings for research question 2b. Table 4.17 shows the means and standard deviation for Care scores at the three time points for the five and nine-week programs.

Table 4.17

Care Scores by Program Length at Three Time points

Program length	Time	Mean	Standard Deviation
5	1	25.26	3.64
9	1	25.69	3.77
5	2	25.57	4.02
9	2	26.53	3.72
5	3	25.32	3.90
9	3	25.56	3.83

A factorial repeated measures ANOVA was conducted. As Maulchy's test indicated a sphericity violation, $\chi^2(2) = 14.01$, $p = .001$, degrees of freedom were corrected using

Huynh-Feldt estimates of sphericity ($\varepsilon = .94$). No statistically significant difference for Care scores due to the length of the program was found, $F(1,157) = 1.03$, $p = .313$.

Character – Quantitative findings for research question 2b. Table 4.18 shows the means and standard deviation for Character scores at the three time points.

Table 4.18

Character Scores by Program Length at Three Time points

Program length	Time	Mean	Standard Deviation
5	1	28.94	4.41
9	1	29.27	4.21
5	2	29.17	4.10
9	2	30.41	3.67
5	3	29.19	4.19
9	3	30.51	3.92

A factorial repeated measures ANOVA was conducted. Maulchy's test for sphericity was met ($p = .54$). No statistically significant difference for Character scores due to the length of the program was found, $F(1,150) = 2.93$, $p = .089$

Connection – Quantitative findings for research question 2b. Table 4.19 shows the means and standard deviation for Connection scores at the three time points for the five and nine-week programs.

Table 4.19

Connection Scores by Program Length at Three Time points

Program length	Time	Mean	Standard Deviation
5	1	31.06	4.96
9	1	30.60	5.45
5	2	32.34	4.15
9	2	32.32	5.21
5	3	31.92	4.74
9	3	30.82	4.50

A factorial repeated measures ANOVA was conducted. As Maulchy's test indicated a sphericity violation, $\chi^2(2) = 24.73$, $p = .000$, degrees of freedom were corrected using

Huynh-Feldt estimates of sphericity (ε = .85). No statistically significant difference for Connection scores due to the length of the program was found, $F(1,156) = .65$, $p = .420$.

Summary of quantitative findings for research question 2b. There was found to be no statistically significant difference in the effect of the program on any of the Five Cs or PYD due to the length of the program one year post program participation.

The following section examines the effect of gender on program outcomes, which relates to research questions 3a and 3b.

Quantitative Findings for Research Question 3a

3a. How do perceptions of development of the Five Cs differ between female and male participants directly after their participation in the SSL program?

PYD – Quantitative findings for research question 3a.. Table 4.20 displays the means and standard deviations for the PYD scores at Time 1 (beginning of the program) and Time 2 (end of the program) by gender.

Table 4.20

PYD Scores for Gender at the Beginning and End of Program

Time	Gender	Mean	Standard Deviation	Number
1	Female	107.18	12.15	162
1	Male	105.02	11.96	163
2	Female	111.33	10.84	162
2	Male	107.66	11.19	163

A factorial repeated measures ANOVA was conducted to examine if there was an effect of gender on PYD scores. No significant effect of gender on PYD scores over the two times was found, $F(1,323) = 2.688$, $p = .102$.

Competence – Quantitative findings for research question 3a. Table 4.21 displays the means and standard deviations for the Competence scores at Time 1 (beginning of the program) and Time 2 (end of the program) by gender.

Table 4.21

Competence Scores for Gender at Beginning and End of Program

Time	Gender	Mean	Standard Deviation	Number
1	Female	16.50	3.06	178
1	Male	17.72	3.00	179
2	Female	17.55	2.77	178
2	Male	18.17	2.76	179

A factorial repeated measures ANOVA was conducted. Asignificant effect of gender on Competence scores over the two times was found, $F(1,355) = 6.164$, $p = .013$, with a very small effect size of partial $\eta^2 = .017$.

Confidence – Quantitative findings for research question 3a. Table 4.22 displays the means and standard deviations for the Confidence scores at Time 1 (beginning of the program) and Time 2 (end of the program) by gender.

Table 4.22

Confidence Scores for Gender at Beginning and End of Program

Time	Gender	Mean	Standard Deviation	Number
1	Female	18.21	4.04	173
1	Male	20.33	3.47	169
2	Female	19.68	3.36	173
2	Male	20.35	3.40	169

A factorial repeated measure ANOVA was conducted. A significant effect of gender on Confidence scores over the two times was found, $F(1,340) = 7.967$, $p = .005$, with a very small effect size of partial $\eta^2 = .023$.

Care – Quantitative findings for research question 3a. Table 4.23 displays the means and standard deviations for the Care scores at Time 1 (beginning of the program) and Time 2 (end of the program) by gender.

Table 4.23

Care Scores for Gender at Beginning and End of Program

Time	Gender	Mean	Standard Deviation	Number
1	Female	26.45	3.08	186
1	Male	24.57	3.85	189
2	Female	26.68	3.61	186
2	Male	24.92	3.79	189

A factorial repeated measures ANOVA was conducted. No significant effect of gender on Care scores over the two times was found, $F(1,373) = .187$, $p = .666$.

Character – Quantitative findings for research question 3a. Table 4.24 displays the means and standard deviations for the Character scores at Time 1 (beginning of the program) and Time 2 (end of the program) by gender.

Table 4.24

Character Scores for Gender at Beginning and End of Program

Time	Gender	Mean	Standard Deviation	Number
1	Female	29.74	4.12	180
1	Male	28.32	4.52	179
2	Female	30.81	3.67	178
2	Male	28.17	2.76	179

A factorial repeated measures ANOVA was conducted. A significant effect of gender on Character scores over the two times was found, $F(1,357) = 6.361$, $p = .012$, with a very small effect size of partial $\eta^2 = .018$. It should be noted that the score for Character had a slightly negative effect for males.

Connection – Quantitative findings for research question 3a. Table 4.25 displays the means and standard deviations for the Connection scores at Time 1 (beginning of the program) and Time 2 (end of the program) by gender.

Table 4.25

Connection Scores for Gender at Beginning and End of Program

Time	Gender	Mean	Standard Deviation	Number
1	Female	31.20	5.44	184
1	Male	30.94	4.66	181
2	Female	32.32	4.64	184
2	Male	32.54	4.91	181

A factorial repeated measures ANOVA was conducted. No significant effect of gender on Connection scores was found over the two times, $F(1,363) = 7.263$, $p = .227$.

Summary of quantitative findings for research question 3a. Whilst no significant effect on PYD overall of gender directly after the program was found, statistically significant differences for Confidence, Competence and Character scores for gender were found, all with very small effect sizes. The next section examines the impact of gender one year post-program participation,

Quantitative Findings for Research Question 3b

3b. How do perceptions of development of the Five Cs differ between female and male participants one year after completion of the SSL program?

PYD – Quantitative findings for research question 3b. Table 4.26 shows the means and standard deviation for PYD at the three time points for each gender, Time 1 being the start of the program, Time 2 the end of the program and Time 3 one year post program.

Table 4.26

PYD Scores by Gender at Three Time points (Male n=60, Female n=72)

Gender	Time	Mean	Standard Deviation
m	1	106.32	12.48
f	1	106.60	12.14
m	2	108.22	11.74
f	2	112.65	9.59
m	3	106.27	12.45
f	3	110.63	10.62

A factorial repeated measures ANOVA was conducted to test for any effects of gender on PYD scores for the three time points. As Maulchy's test a sphericity violation, $\chi^2(2) = 12.41$, $p = .002$, degrees of freedom were corrected using Huynh-Feldt estimates of sphericity ($\varepsilon = .94$). A statistically significant difference was found for PYD due to gender, $F(1.871, 243.24) = 4.060$, $p = .021$ over the three time points with a small effect size of partial $\eta^2 = .03$.

Competence – Quantitative findings for research question 3b. Table 4.27 shows the means and standard deviation for Competence scores at the three time points for gender.

Table 4.27

Competence Scores by Gender at Three Time points (Male n=73, Female n=80)

Gender	Time	Mean	Standard Deviation
m	1	17.10	3.11
f	1	16.33	2.99
m	2	17.68	2.93
f	2	17.64	2.65
m	3	17.97	3.25
f	3	17.58	3.73

A factorial repeated measures ANOVA was conducted. As Maulchy's test indicated a sphericity violation, $\chi^2(2) = 12.745$, $p = .002$ degrees of freedom were corrected using Huynh-Feldt estimates of sphericity ($\varepsilon = .94$). No statistically significant difference for Competence scores due to gender was found over the three time points, $F(1.884, 284.435) = 1.654$, $p = .195$.

Confidence – Quantitative findings for research question 3b. Table 4.28 shows the means and standard deviation for Confidence scores at the three time points for each gender, Time 1 being the start of the program, Time 2 the end of the program and Time 3 one year post program.

Table 4.28

Confidence Scores by Gender at Three Time points (Male n=60, Female n=77)

Gender	Time	Mean	Standard Deviation
m	1	19.97	3.63
f	1	18.42	4.21
m	2	20.98	3.35
f	2	20.26	2.92
m	3	20.60	3.54
f	3	20.05	3.23

A factorial repeated measures ANOVA was conducted. As Maulchy's test indicated a sphericity violation, $\chi^2(2) = 9.960$, $p = .007$ degrees of freedom were corrected using Huynh-Feldt estimates of sphericity ($\varepsilon = .95$). No statistically significant difference was found for Confidence scores due to gender over the three time points, $F(1.905, 257.241) = 1.989$, $p = .141$.

Care – Quantitative findings for research question 3b. Table 4.29 shows the means and standard deviation for Care scores at the three time points for each gender.

Table 4.29

Care Scores by Gender for Three Time points (Male n=74, Female n=85)

Gender	Time	Mean	Standard Deviation
m	1	24.82	4.13
f	1	25.96	3.18
m	2	25.04	4.11
f	2	26.72	3.59
m	3	24.62	3.91
f	3	26.11	3.71

A factorial repeated measures ANOVA was conducted. As Maulchy's test indicated a sphericity violation, $\chi^2(2) = 14.252$, $p = .001$ degrees of freedom were corrected using Huynh-Feldt estimates of sphericity ($\varepsilon = .94$). No statistically significant difference for Care scores due to gender over three time points was found, $F(1.872, 293.909) = .551$, $p = .565$.

Character – Quantitative findings for research question 3b. Table 4.30 shows the means and standard deviation for Character scores at the three time points for each gender

Table 4.30

Character Scores by Gender at Three Time points (Male n =70, Female n=82)

Gender	Time	Mean	Standard Deviation
m	1	28.54	4.66
f	1	29.51	3.98
m	2	28.53	4.21
f	2	30.68	3.50
m	3	28.79	4.47
f	3	30.49	3.66

A factorial repeated measures ANOVA was conducted. Maulchy's Test indicated sphericity was met, (p = .52). No statistically significant difference was found for Character scores due to genderover the three time points, $F(2, 300)$ =1.892, p = .153.

Connection – Quantitative findings for research question 3b. Table 4.31 shows the means and standard deviation for Connection scores at the three time points for each gender

Table 4.31

Connection Scores by Gender over Three Time points (Male n=72, Female n=86)

Gender	Time	Mean	Standard Deviation
m	1	31.08	4.68
f	1	30.70	5.55
m	2	32.31	4.47
f	2	32.36	4.73
m	3	30.93	5.10
f	3	31.92	4.23

A factorial repeated measures ANOVA was conducted. As Maulchy's test indicated a sphericity violation, $\chi^2(2) = 23.641$, p = .000 degrees of freedom were corrected using Huynh-Feldt estimates of sphericity ($\varepsilon = .891$). No statistically significant difference for Connection scores was found due to gender over the three time points, $F(1.782, 277.960) = 1.957$, p = .148.

Summary of quantitative findings for research question 3b. There was found to be an effect of gender on the outcomes of PYD one year post program, although it had a

very small effect size. There was no effect of gender overall on the difference in outcomes for the other Five Cs over the three time periods.

Chapter Four Summary

This chapter provided findings from the analysis of the quantitative data in relation to the research questions. It indicated that statistically significant positive differences were found for PYD scores and scores for each of the Five Cs following participation in the program, although these effects diminish for some of the constructs one year post program. The findings also indicated that program length was not statistically significant for the Five Cs or PYD, although there were some statistically significant differences for gender in relation to some of the constructs. The following chapter provides a discussion of the findings from the analysis of the qualitative data obtained from the individual interviews and group discussions.

Chapter Five: Qualitative Data Analysis and Findings

In addition to the surveys, which provided the quantitative data for the current research project, qualitative data were also collected via interviews at the end of the program and one year post program. A number of unsolicited responses and letters were also sent by participants who were completing the one year post program survey and that data was included as part of the qualitative element of the current study. The qualitative data from the interviews were analysed using QSR NVivo10®, and as with the quantitative data, findings are presented separately for each research question in this chapter. Initially, an outline of the coding method used and the themes through which the data were coded is described. The in-depth analysis, which focussed on the Five Cs model of PYD, examining all comments made about these constructs, is then presented. Representative comments have been selected in order to demonstrate the findings of the qualitative data, and enable student voice to be heard. The merging of the two data sets in a process of triangulation is described in the next chapter.

Method of Qualitative Data Analysis

The qualitative data were analysed through descriptive, topic and analytical coding (Richards, 2009) with the subsequent emergence of identifiable themes (Gibb, 2002). The literature review and research questions provided a framework for the categories for the descriptive and topic coding, and the categories for the analytical coding were developed from a more in-depth analysis of the interview data. Propositional statements for each of the constructs, which were derived from the descriptions of the Five Cs as outlined in Chapter Two, assisted in the categorising of the data (Gibb, 2002), and are listed in Table 5.1.

Table 5.1

Propositional Statement for the Five Cs of Positive Youth Development

Construct	Propositional Statement
Competence	Development of skills in the areas of academic, physical, social, leadership and public speaking
Confidence	Development of self-belief, gaining better understanding of strengths and abilities
Character	Development of maturity, taking responsibility for self, developing an understanding of others, dealing with conflict and maintaining positivity
Care	Development of empathy and understanding others' feelings
Connection	Development of a sense of belonging, making friends, being part of a community

The coding method that was utilised involved a number of steps, using the constant comparative method of analysis, which allowed theory to be induced (Babbie, 2001). After the initial coding, the data were re-examined and more focussed coding took place, through a process known as axial coding. This supported the development of highly refined themes from previous coding, and resulted in the development of theories in relation to the research questions (Hahn, 2008). This is illustrated in Figure 5.1.

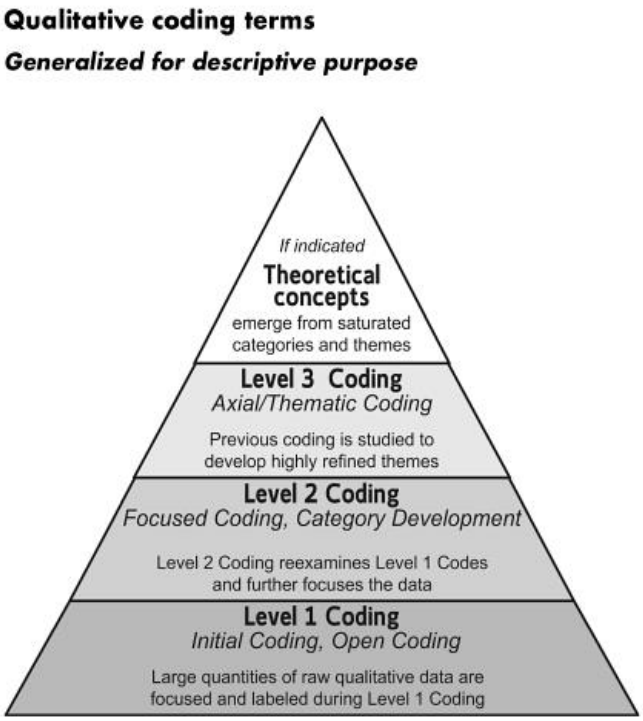

Figure 5.1. Qualitative Coding terms: Generalised for descriptive purposes. Reprinted from *Doing qualitative research using your computer: A practical* guide (p.6), by C. Hahn, 2008, London, England: Sage Publications. Copyright 2008 by SAGE Publications.

The emergent themes were then analysed for their frequency, detail and the story they told. This analysis enabled theories to be established from the qualitative data in response to the research questions. The qualitative data analysis was undertaken using QSR NVivo10®. All interviews and letters were transcribed and imported into the program. Table 5.2 displays a list of themes which emerged from the data and the number of times they were referenced in all interviews.

Table 5.2

Themes from the Interviews

Theme	Number of references	Theme	Number of references
Technology	4	CLP	54
Program length	100	Outside activities	10
Activities	53	Leadership	58
Independence	30	DEARR	62
Connection	69	Confidence	110
Competence	110	Character	76
Care	34		

'DEARR' (drop everything and read and reflect – a daily written personal reflection time). 'CLP' (community learning project) and 'activities' were mentioned over 50 times each in the interviews, although these themes often occurred through the use of guided questions, such as, "How successful do you think your CLP will be?". The themes of leadership and independence were recurring themes, and many of the references from the participants were also marked in other themes such as Competence and Confidence. There was a noticeable lack of comments about technology, possibly due to its overall absence from the program. There were also only 10 references made to outside activities, despite this being a large part of the program.

All the themes were then explored in more detail using the axial coding process (Hahn, 2008) in order to establish theories to address the research questions. The data in this chapter presents the analysis of the interviews in relation to each of the research questions, specifically referring to the themes of the Five Cs. Representative comments from the participants have been provided verbatim rather than using any corrections in order to preserve the authenticity of the data. This has able enabled a strong student voice to emerge from the data.

Interview Participants

End of program interview participants. A total of 58 interviews were conducted, comprising 47 individual interviews and 11 group interviews conducted in the last week of each program at both the Alpine School Campus and the Snowy River Campus. Table 3.3 in Chapter Three, provides a breakdown of the individual and group interviews conducted.

As would be expected, for both the individual and group interviews, significantly more interviews were conducted with participants of the five-week program than the nine-

week program, as six of the nine terms were of five weeks duration. Gender representation was fairly equal in the individual interviews with 22 females and 25 males interviewed. However, in the group interviews there were fewer males (n =18) compared to females (n = 31) interviewed. The representation of rural students was higher (n = 29) than for city students (n = 18) and there were seven rural groups compared to four city groups. One of the reasons for this was that two of the programs (2A and 2B) consisted of all rural schools with no city schools participating.

One year post program interview participants. A total of 14 interviews were conducted one year post program, as illustrated in Table 3.4 in Chapter Three. Of these interviews, three were with groups and 11 with individuals. The group interviews were conducted face to face at the home schools of the students or via video conferencing, while the individual interviews were conducted either in person or via telephone. All interviews were recorded and transcribed.

Six individual interviews were conducted with participants from the Alpine School Campus and five from the Snowy River Campus. One of the group interviews was conducted with participants from the Alpine School Campus, and two group interviews were with Snowy River Campus participants. Genders were also fairly equally represented, with six female students and five male students participating in the individual interviews. In the group interviews sixty-five percent of participants were female and thirty-five percent male. Two groups were city based and one group was rural based. Four of the individual participants were from the city with the remaining seven from rural locations.

Details of Interview Participants

All interviews were recorded and transcribed. In order to protect the privacy of interview participants, two randomly assigned letters were used to identify participant responses. For example, EC, M, 9 indicates a male participant who attended a nine-week program. Appendix 4 provides further details of each of the interview respondents regarding the campus they attended and whether they were from a rural or city home school. Participants in group interviews were identified with a letter and a number, rather than two letters, such as M3, F, 9. Appendix 4 also identifies participants who sent extra written responses over and above the response to the survey at the one year post program iteration. These participants are identified with the initials of the campus they attended and a number, for example SR1.

A comparison of the group and individual interviews

As discussed in Chapter Three, there were both individual and group interviews conducted post program and one year post program. Group interviews can provide more opportunities for the participants to 'bounce ideas off each other' and possibly provide more varied and rich data (Morgan, 1997; O'Toole & Beckett, 2010). An analysis of the group and individual interview data, which referred to the participants' perception of the Five Cs, was undertaken. Figure 5.2 illustrates the percentage of references to each of the Five Cs for the individual and group interviews.

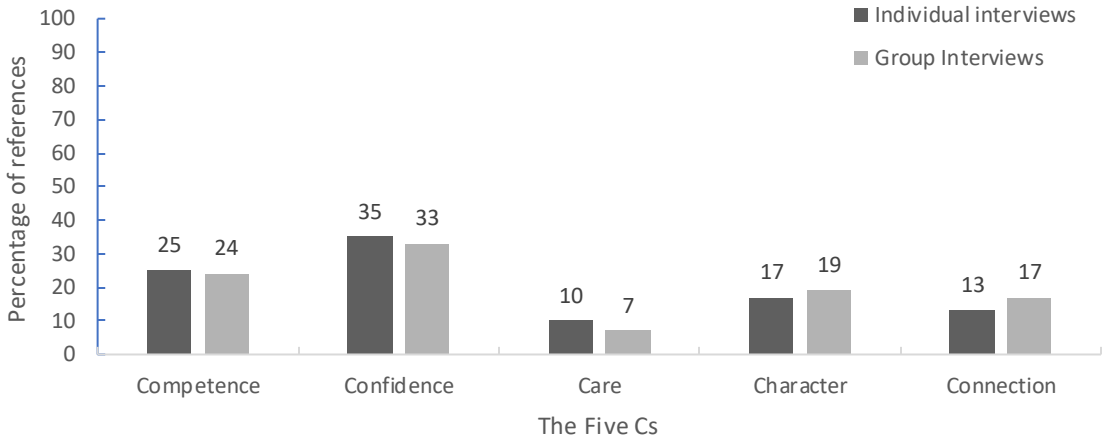

Figure 5.2. Percentage of references for the Five Cs in group and individual interviews.

Figure 5.2 demonstrated that there was little difference for each of the Five Cs according to whether it was a group or an individual interview. The data provided by both interview types at each interview stage, proved to be very similar when analysed, with no statistically significant difference. Possibly this was due to the trust the participants had for one another after the program, and the familiarity with each other. Participants felt just as comfortable speaking individually as in a group situation. Due to the lack of difference noted for the group and individual interviews, the group and individual data were combined for analytical purposes.

Data about the Five Cs

The data from the interviews were analysed with a focus on perceived development in the areas of the Five Cs. Generally, the discussion relating to each of the five constructs was positive, with few references to any negative development with regard to Confidence, Competence, Character, Care and Connection. For this reason, the quotes may appear to be

overwhelmingly supportive of the positive nature of the program. However, this is understandable given that the focus of the research was PYD, and previous research has illustrated that students rate the positive aspects of the SSL program very highly (Dyson & Zink, 2009: Dyson & Plunkett, 2012; Plunkett, Dyson & Scneider, 2013). There were, therefore, few contradictory statements about the program producing positive results. The particular value of the qualitative data was in enabling a comparison of the responses in relation to the five constructs, particularly in light of the two different program lengths. It also provided an important avenue for student voice to be heard (Hart & Nolan, 1999).

Qualitative Findings for Research Question 1a

In what ways do students at the SSL perceive their development in relation to the Five Cs model of PYD, namely Character, Competence, Connection, Confidence and Care, directly after their participation in the SSL program?

To address this question the data from the group and individual interviews at the end of each program were analysed. Table 5.3 displays the number of references from the interviews and the percentage of the occurrence of these references for each of the Five Cs, compared to the other constructs. Both number of references and a percentage were calculated, in order to facilitate comparisons of data for length of program and one year post program interviews. Table 5.3 also contains the percentage of participants who referred to each of the constructs of the Five Cs.

Table 5.3

Number and Percentage of References to the Five Cs in End of Program Interviews

Concept	Number of times referenced in end of program interviews	Percentage of Five C references	Percentage of participants who referenced construct
Competence	70	24	66
Confidence	89	31	74
Care	31	10	36
Character	63	22	55
Connection	37	13	33

As illustrated in Table 5.3, there were significantly more references to Confidence, Competence and Character than to Care and Connection. Each of the Five Cs was then examined in detail.

Competence – qualitative findings for research question 1a. Competence was referred to by two thirds of the participants in the end of program interviews. Table 5.4 displays the references to a range of different concepts that fitted into the construct of Competence. Physical competence barely rated a mention, whereas participants often referred to Competence in relation to social factors and leadership. There were also some comments made generally about Competence, which were not listed in Table 5.5, as they did not refer to a specific area of Competence.

Table 5.4

Number of References to Areas of Competence in the End of Program Interviews

Area of Competence	Number of references in end of program interviews	Percentage of Area of Competence References
Leadership Skills	17	29
Social	16	27
Academic	13	22
Public speaking	12	20
Physical	1	2

There were no negative comments made by participants in relation to their perceived development of Competence. The most commonly mentioned competency, with 17 references, was the development of leadership skills, as illustrated in the following comments:

We can take on more leadership responsibilities because we know what it's all about and we know what's involved and we can commit to that (CC, F, 5).

I wouldn't have done any of that stuff. It's just opened my eyes to what I can do as a leader (NA, F, 5).

The most valuable thing I've learned was probably all the different ways of leadership techniques. Like not being aggressively controlling by just pushing other ideas out of the way. And a democratic leader, listening to everyone's opinion and making the best choice (UT, M, 9).

Social competence was also referred to 16 times:

My teamwork has definitely got better because at school I used to avoid it - working as a team - and I kind of feel like I am one of those people that just sat back and did

whatever I was told to do, but now I... I like take initiative and I like share my opinions as well as listening to other people (DJ, F, 5).

Back at home I'm pretty independent, I'm independent in class so I don't work in groups but like speaking to people and stuff, I struggle speaking to people myself. There's a few times I need to speak to teachers but I've struggled, now I'm a lot better at that, so now I just speak to them by myself, I don't have people drag me to the staff room. And now I thought I can do it a lot easier, I can talk to people more independently (PR, F, 9).

Now I really like know what a team is compared to a group of people. And I think that helped because it helps the way you talk to other people and just things like that (AK, F, 5).

Public speaking was a large part of the everyday program at the SSL so it was not surprising that it was mentioned 12 times in terms of development of Competence.

I've had all these like lessons and now I know a lot more about how other people think and how I think and I've learnt how to present things and I've learned how to capture an audience so I can do things now, I can speak better now. I think people will see that I have definitely become more confident (E4, F, 9).

I think that we all built up our confidence. I know that for me, I wouldn't be able to stand up in front of people, without getting really nervous and just wanting to cry (laughs) but I think we've all improved in our confidence....yeah. I was up there really shaking - I did really well though (L2, M, 5).

Probably more confident, 'cause I'm still not as confident. Before I came here, I was just horrible, like my public speaking like I just don't do public speaking. Just yesterday they told me how well I was going at public speaking it kind of just shocked me. I didn't realise that I was that good. So, I reckon I must've changed 'cause I wasn't like that when I came, I was told I needed to work on that (PR, F, 9).

Thirteen students mentioned developing a greater understanding of how they learn, displaying gains in academic competence. The development of meta-cognitive skills was a focus of many of the SSL classes, in particular the Thinking and Learning classes. These were often mentioned in detail, such as in the following comment:

How I learn because it makes a big difference for how I can do homework and how I can complete other tasks because I know how I can do them without taking too much time to work out what's going on (UC, F, 5).

Surprisingly, despite a large part of the program involving physically challenging activities, such as Expos, only one student commented that they felt like they had gained physical competence during the program. His comment referred to gaining and maintaining strength from physical activities:

Since I've come to this camp I probably think that I'm stronger so that might be good. I've managed to stay on top of it (IC, M 5).

According to the data, participants perceived they had developed more Competence, particularly in the fields of leadership and social competence. Participants expressed gains in Competence in relation to being leaders, working in team situations, speaking in public and acting as a group leader in a team. Participants also claimed they felt better equipped after the program to understand their learning needs at school, which is a measure of academic competence.

Confidence – qualitative findings for research question 1a. Confidence in the context of PYD refers to developing a sense of self-worth and self-belief (Lerner et al., 2013). In many of the interviews, participants mentioned that they gained confidence from the program. However, when this was further explored, often the term Confidence related to public speaking skills and the ability to voice opinions, which in the PYD context fits under the banner of Competence. Therefore, whilst Confidence was often referred to in the interviews, it has often been coded as Competence. The coding for Confidence referred to self-belief and gaining a better understanding of one's strengths and abilities.

Confidence was mentioned more than any of the other Five C constructs in the interviews, with 74% of the transcriptions containing at least one reference to Confidence, accounting for 31% of the mentions of the Five Cs.

Following are some representative comments from the participants about Confidence:

I think I've become more confident, like I was confident before, but now I'm more confident in myself, like don't care what others think about me anymore, like before I did (C3, F, 9).

I know who I am a bit more. I hadn't really thought about what I've placed values with before the beliefs and values class, and I know I think it's much easier to know what I want to get out of life. Who I am, what's important to me (DT, F, 5).

Knowing that I have more confidence in what I can do now, more responsibilities, I used to just say I'd do it, but I wouldn't do it, but now I'm actually doing it. (E2, M, 9).

My main goal was to be confident and step up more and be a leader, 'cause I always used to be a follower, just stick to the responsibilities and the tasks, but now I like to step up and I feel like I've gained more confidence (KJ, M, 9).

It really helped figure out who you are and you understand yourself better (IB, F, 5).

Guess we were always encouraged to share our opinions on things - my thinking's always been - I kind of judge myself and think I'll be thought stupid. So here I'm a lot more confident with ideas and trying things before I say things (M2, F, 9).

*I struggle with being confident in myself physically, like doing well and stuff like that. But I manage it by being around my Expo group, which was really good 'cause they're all really encouraging, and just worked all like together. But I guess after the first Expo I knew I could be fine, I wasn't worried anymore (*NV, F, 5).

You get to be yourself. After five weeks living with different people, you just kind of forget what you look like a bit, like just don't care (N4, F, 5).

Definitely my understanding and knowing more about my strengths and weaknesses. So, knowing what I'm good at and what I really need to improve upon. Doing different activities, figuring out strengths and weaknesses and expressing them (W1, M, 5).

Participants expressed acknowledgement of feeling more comfortable with being themselves, which resulted in greater self-esteem. They indicated that they felt comfortable with their peers at the school and possessed a better understanding of self.

Although the majority of comments in relation to growth of confidence were positive, two participants expressed some doubt about the confidence they had gained:

I don't feel exactly the same, but I was hoping to gain more confidence 'cause I kind of get quiet and stuff in situations when I'm not used to it, like when I'm with people who I've known for ages I'm really confident and really talkative, crazy and stuff, I was hoping I'd gain more confidence to be like that around new people and I don't know if I have (W5, F, 5).

You tend to doubt yourself, and there were times I wasn't too sure of myself and I'd put myself down, if someone said something stupid, I'd put another meaning to it sometimes (C3, F, 9).

These were the only negative comments in the interviews regarding uncertainty about confidence gained. It should be noted that both comments were made in group interviews.

Overall most participants noted a positive development in their Confidence during the program. This included higher self-esteem and a greater understanding of self. Participants spoke of feeling comfortable being themselves during the program and of having the confidence to try new things and step out of their comfort zones.

Care – qualitative findings for research question 1a. References to participants' understanding of the feeling of others and displaying a development of empathy were coded under the construct of Care. Only a third of interview participants referred to the construct of Care, with it accounting for only 11% of the references to the Five Cs in the end of program interviews. Care was illustrated in the following comments:

You've got to think about the team and you've also got to think about the individual as well, so their wellbeing, or your own wellbeing (IC, M, 5).

So, I want to try and include others (KT, F, 5).

Sometimes I'm a bit mean to my little brother and I want to be really nice to him because he's a really special person and I really love him and he's one of the most amazing people so he really deserves me to love him a bit more (N2, F, 5).

I think for me one of the big things is learning how to be around people and to be really selfless and to sort of be the best you can for other people, that's been a big part of it for me (N1, M, 5).

Development of aspects which fit within the construct of Care were not mentioned by two thirds of the participants. Those that did mention Care focussed on trying to include others in activities and ensure that they were looking after team members. Whilst there were no negative mentions of aspects relating to Care, it was not perceived as a strong developmental attribute for the participants.

Character – qualitative findings for research question 1a. Comments from the participants about their perceived development in relation to maturity, taking responsibility for self, developing an understanding of others, dealing with conflict and maintaining positivity were coded as references to the construct of Character. Fifty-five percent of the participants made reference to how they perceived the program impacting on their Character, which accounted for 22% of the references to the Five Cs, as shown in Table 5.3. There were no negative references in relation to this construct, only positive perceptions about the impact of the program on Character.

Table 5.5 denotes the number of references made to certain aspects of Character during the interviews.

Table 5.5

Number of References to Character in the End of Program Interviews

Reference	Number of references
Maturity	9
Responsibility	15
Understanding of others and dealing with conflict	16
Positivity	13

Some of the comments referring to the development of maturity and responsibility from students were as follows:

Instead of acting - being misbehaved, I'll probably go home and act more mature and sensible (EC, M, 9).

Maybe I'm a lot more mature now. It used to just be I'd just joke around and not actually do my work, now I sort of know where that line is, and when it's time to do my work (MG, M 5).

I was just more responsible, like, because my brother was playing around, like playing inside. So, I said stop instead of joining him (EC, M, 9).

There were 13 references relating to becoming more positive. Following are some representative examples:

Even though it's weird to say, but the skills I've learnt here and the values I've adopted have given me a more positive and more exciting outlook on life (CC, F, 5).

When I came here I was a fairly negative person and I wasn't very confident, but I guess especially after Expo 2 and the CLP Presentation I've gained more confidence in myself and with others and I'm a more positive person (TD, M, 5).

Sixteen comments referred to recognition of diversity and of gaining a deeper understanding of others, with the following comments representative of the points raised by students:

It's been pretty cool to see the different views and how everyone sees the world. We're all the same but we're all different and it's been really cool to see the diversity (M3, F, 9).

I think I have a different approach and have learned different perspectives on how to see things and see things from different perspectives, like put yourself in their shoes and things (M4, F 5).

And just 'cause you have different views doesn't necessarily mean you're a bad person. I always associate people who have a certain view with really judgemental really harsh people, but here people have those views and they're not anything like that (M1, F, 9).

Here with all the different country kids here, in Melbourne you usually have the same people, but here you can be individual, that's a really cool thing, cause I have a little bit of an eccentric, different personality and that's really accepted here (NV, F, 5).

I'm not so judgemental anymore because I realise differences are good things not bad things (NJ, F, 5).

A number of students also mentioned that they were better at dealing with conflict and thought they had become a nicer person:

Probably going to realise that I've become nicer, because people here have said I've become nicer and less annoying, cause I used to just be really annoying (E2, M, 9).

They'll probably notice I've become more confident and I'm nicer, because I used to be kind of mean because I get bullied a lot so I sort of become nicer since I've been here, and I probably notice that (KB, F, 5).

A perception of positive development in relation to the construct of Character was evident in the interview responses of over half of the participants, particularly in relation to developing maturity, understanding of the world, diversity and positivity. It was evident in many of the comments that participants were able to recognise and verbalise the changes they perceived in their character development over the time they had been at the SSL.

Connection – qualitative findings for research question 1a. References to making friends and being a part of a community fitted under the construct of Connection. There were actually very few references in the majority of the interviews explicitly referring to development in the area of Connection. There were, however, many references to friendships formed when students gave a comparison of the five and the nine-week program.

Students predominantly discussed friendship as a way of connecting, rather than looking at the bigger picture of community, as illustrated in the following quotes:

Probably just getting to know everyone, having all these people around so if you don't want to talk to someone you can just go and talk to someone else And also just being with different groups, after being with the same group every day, It's so much fun just being able to talk to new people and have new experiences and making new memories (M5, F, 5).

It kind of like means that you see these people every day and you have to kind of, like, you can't just go living with your problems, that's why we learned about conflict

management, you kind of have to face things here like and I've gotten used to living with a roommate, living with girls that I see every morning, every night every day, kind of just face it, like at school you see everyone every single day, so yeah, it's a bit different, but it will be different going back having to settle back with your family and going to normal school (O2, F, 5).

It's just been getting to know all the girls I've formed some really good friendships and some of my best friends in five weeks, which is, like sometimes it takes you a year to get to know someone so in five weeks it's been pretty good, it's a whole new experience, all the new knowledge I've gained, I've become more wise maybe, all the new knowledge, everything I've learned (O3, F, 5).

The CLP was one of the key connectors for participants on their return to their home school. Although there were few explicit mentions of connection to community, all students were asked about their CLP during the interviews. They were also given the opportunity to rank their perception of how successful the completion of their team's CLP would be. Ninety percent of participants ranked their CLP completion as at least 8 out of 10.

Definitely being here has like if we hadn't been here we wouldn't be making a difference within our community so it's really good (DJ, F, 5).

Figure 5.3 is a word frequency picture, which depicts common words participants used in their interviews referring to their thoughts about their CLP and its completion. The larger words appeared more frequently.

Figure 5.3: CLP word frequency – end of program.

Figure 5.3 indicates a sense of a positive attitude towards the CLP. This really appeared to be the main link to Connection from the participants in the interviews. Although all participants discussed their CLPs once asked about it in the interview, they did not often explicitly make the link with CLP and Connection.

Although there were no negative mentions of Connection and participants appeared to be strongly motivated to achieve their CLPs, Connection was not often a development of the program about which participants choose to speak.

Summary of qualitative findings for research question 1a. The interview responses supported a perception by participants of development in each of the Five Cs, which when combined, suggested that the students were displaying signs of PYD. Although some of the constructs were referred to more commonly than others, there was still evidence of a perceived growth or progression in relation to each of them. This was particularly notable in relation to the constructs of Confidence, Competence and Character, with Connection and Care not referred to as often. There was notably almost a nonexistence of negative comments about personal development linked to the SSL program, with the exception of two less positive comments about Confidence.

According to the interview data, participants exiting the program perceived they had progressed personally and had a better, stronger understanding of self, and displayed greater confidence than before the program. They perceived themselves as more competent leaders and more able to speak publicly and manage themselves. They described the development of team skills that assisted in feeling more socially competent and independent. Participants highlighted the bonds formed within the school community and engagement and commitment to their CLP projects to be finished at their home school. The interview data supported perceptions of an elevated sense of positivity and willingness to take responsibility for themselves.

Qualitative Findings for Research Question 1b

In what ways do students at the SSL perceive their development in relation to the Five Cs model of PYD, namely Character, Competence, Connection, Confidence and Care, one year after completion of the SSL program?

The one year post program interviews were coded into themes using QSR NVivo10®. The themes used were the same as those for Research Question 1a, in order for continuity of data analysis.

Table 5.6 displays the number of references from the one year post program interviews, the percentage of these references for each of the Five Cs and the percentage of participants referring to each of the Five Cs.

Table 5.6

Number and Percentage of References to the Five Cs in One Year Post Program Interviews

Concept	Number of times referenced in one year post program interviews	Percentage of Five Cs references	Percentage of participants who referenced construct
Competence	40	37	81
Confidence	21	20	63
Care	3	3	43
Character	13	12	43
Connection	30	28	94

As outlined in Table 5.6, the constructs of Competence, Connection and Confidence received a larger percentage of the mentions in the interviews, but Character and Care were not featured as strongly. These findings are notably different from the findings from the end of program interviews, where Connection did not rank highly, but Character did. Each of the Five Cs was then examined in more detail.

Competence - qualitative findings for research question 1b. Aspects that could be construed as fitting within the construct of Competence were mentioned by 81% of the interview participants one year post program, as something gained from the SSL experience with a lasting effect. These aspects included Competence in relation to academic, leadership, social, physical and public speaking. Table 5.7 depicts the breakdown of the references to Competence in the one year post program interviews.

Table 5.7

Number of References to Areas of Competence in the One Year Post Program Interviews

Area of Competence	Number of references in one year post program interviews	Percentage of Area of Competence References
Leadership Skills	18	50
Social	2	6
Academic	13	36
Public speaking	3	8
Physical	0	0

While there was only one explicit reference to physical competence in interviews conducted at the end of the program, in the one year post program interviews, it did not figure at all. There were also very few references made to public speaking and social competence. This was notably different to the end of program interviews program where public speaking and social competence received 20% and 27% of the responses respectively. As with the end of program interviews, participants one year post program continued to highlight the value of the SSL program in terms of developing classroom skills, particularly mentioning the Thinking and Learning classes:

It made me realise how I like to learn, what's the best environment for me learning, I've planned my time better, before I went to the Alpine School I wasn't very good at that, I'd always be rushing everything, now I plan my time, set certain times for me to do my homework, instead of doing it all on one night I will separate it so it's on different nights (DL, F, 9).

Thinking and Learning was really useful, learning the brain quadrants. I've used it back at school, helped me with my learning (HM, F, 9).

I find myself kind of always looking back at the little things we learnt, and it's impacted me that way, it's kind of changing the way that I am learning and the way that I go about my studies and stuff (M5, F, 5).

Over half of the interviewees mentioned that they were still undertaking some sort of reflection, be it written or just thought about, a skill which they had gained at the SSL.

Most participants also mentioned involvement in a range of leadership activities, with 18 references to leadership abilities. When questioned about whether their involvement in these activities was directly due to their participation in the SSL, responses were mixed. A

number mentioned a direct link, while others explained that they probably would have been involved anyway:

Well I just got accepted into VCAL at school, I think the Alpine School helped me get into VCAL (BR, M, 5).

Yeah, like I, my leadership skills, like I came back and I got captain of the footy team and stuff like that. It's hard to tell if it was because of the program, but I reckon it did help my leadership skills (B2, M, 5).

The interview data supports a perception by participants of improved academic and leadership competence after participation in the SSL program, although some were unsure if the program alone helped these competencies or if there were other extraneous factors. The following student demonstrated the uncertainty of whether it was the SSL or other factors which assisted with her development of leadership skills:

Leadership stuff - I did lots of stuff on our CLP and took roles for the CLP. Might have taken on these roles without the Alpine School, but I'm not sure (CS, F, 5).

Academic and leadership skills were the most commonly mentioned areas of Competence one year post program. It appeared that social competence and public speaking skills were not perceived as strongly as areas of Competence gained one year post program as they were at the end of the program.

Confidence – qualitative findings for research question 1b. Two thirds of the participants mentioned that they perceived the program as having a positive impact on their Confidence. While students interviewed at the end of the program tended to refer to Confidence in terms of feeling confident about performing and public speaking (which was actually then coded as Competence), students one year post program had a different definition of Confidence. They generally referred to it in terms of the ability to move out of one's comfort zone and speak to a range of people on a range of levels. Half of the participants discussed being able to talk to more people and try new things following their participation in the SSL program, as represented in the following comment:

I feel being a part of this leadership program has hugely impacted me as a whole. After leaving, I found my confidence had grown. I'm more willing to try many new things and open to sharing my honest opinion more openly (SR3, F, 9).

The Confidence which students perceived they had gained from the program also involved gaining a greater understanding of self. One particular participant identified her increased Confidence as the reason she is now able to take on leadership roles in her life:

I feel that my SSL experience has made a huge impact on my life. I am now a much more confident, outgoing person who is no longer afraid of what people think of me, while this change has been seen as too much for some of my friends, I feel that it has helped me to become a better version of me. Because of my developed confidence, I am taking up leadership roles I would never have done previous to going to Snowy River Campus (SR4, F, 9).

The following participant attributed her increase in Confidence to the independence which the school had fostered:

I find its the amount of independence that we had; the teachers kind of give you guidance, but then you really are responsible for yourself in a way that you're not at school which is fantastic (M5, F, 5).

There were no negative comments made in relation to the construct of Confidence and it was evident from the data that this was perceived as a positive result of involvement in the SSL program one year after participation. Participants stated that they were able to take up leadership roles and attempt new challenges more readily as a result of their participation in the SSL program.

Care - qualitative findings for research question 1b. Once again, there were limited references to the construct of Care in the one year post program interviews, with only 19% of participants speaking about Care, which demonstrated that this construct was not perceived as one that is impacted by participation in the SSL program either post program or one year after the program.

Character - qualitative findings for research question 1b. Forty-three percent of the interviewees noted positive changes in their Character since attending the SSL. Most of the changes they referred to related to an increase in maturity and an ability to relate more to others and think positively.

Table 5.8 denotes the number of references to aspects of Character from the interviews.

Table 5.8

Number of References to Character in the One Year Post Program Interviews

Reference	Number of references
Maturity	4
Responsibility	1
Understanding of others and dealing with conflict	5
Positivity	4

A representation of comments about character development included:

It helped me see a different side to everything. It really has changed me to be a better person with a much more positive outlook on life and all that comes with that (SR5, F, 5).

During my time at Snowy, I was challenged to create friendships with 40 individuals, to show empathy and kindness even when I wanted to go somewhere and hide and cry, SRC also gave me the confidence and environment to stand up to people, something I would never have seen myself doing. I believe that the 9 weeks I spent at Snowy have been formative and crucial to the person I have become today (SR2, F, 9).

One particularly emotive participant wrote the following, attached as a letter with the survey.

You have changed my life (for the better) and I thank you for that. You helped me recover my confidence that I had lost long before. You helped me to realise my potential and why I am important to this world. If it wasn't for you I would still be trapped in depression and negativity. I cannot express in words what you have done for me. You have helped me realise who I am. You have helped me to accept people no matter what others may thing of me. Everything you have taught me has helped so much and I will remember as much as I can from my experience there. You have helped me conquer many of my fears and problems. I can stand up for myself now. Thank you for helping me and making me who I am today. Without you I may not be here today. You helped me beyond belief, beyond words, and I thank you (SR11, M, 5).

Anecdotally, this sort of response is not uncommon in terms of unsolicited responses that are received by teachers at the SSL, and is testament to the depth of feeling that students who attend the SSL program have reported once they have left and had time to reflect on the impact that the program had on their character development.

Nonetheless, the construct of Character accounted for only 12% of the references to

the Five Cs, compared to 22% of the post program interviews. However, there were mentions of aspects of character development emanating from participation in the SSL program by 43% of the interviewees. Participants noted that the program had given them more maturity and a more positive outlook.

Connection - qualitative findings for research question 1b. Remarks in relation to the construct of Connection were comparatively more frequent in the one year post program interviews (28% of the references to the Five Cs) than in the end of program interviews (13% of Five Cs references). Connection was particularly high as interview statements were coded as fitting within the construct of Connection when they involved maintaining friendships post the SSL program, which was a very common theme amongst participants. All the participants mentioned Connection to friends. Most were still in contact with students from their program, with the predominant mode of communication being Facebook.

Connection was the only one of the Five Cs where students sometimes found some difficulties and issues, either with fitting back in with their social group post program or reflecting on the connections they had made:

I think the main thing that really changed about me would probably be spending time with who I want to. I had a couple of tough things before I went away, and now I'm like, no I don't want to be with those people, I don't want to spend time with those people, they don't make me happy (DL, F, 9).

Friendship group - has changed a little bit, but mainly the same, probably wouldn't have changed as much as if I hadn't gone (BR. M. 5).

One participant mentioned that there had been some difficulties during the program connecting with peers and fitting in to a social group. This participant had not mentioned this in the interview at the end of the program:

Probably knowing where I fit in, 'cause there were two different groups at Snowy, like no one really admitted that but you could totally see that there was. I didn't know whether I was with all the, let's say, popular type people or the not so popular people, but I was kind of in the middle of both which was really good. People still judge people on what they do and what they look like, but you know, it's probably a lot less than what it is at school, 'cause you're living with these people so you have to learn to accept who they are (DL, F, 9).

There were fewer references to Connection in terms of connection to community. Many participants had struggled to complete their CLP, citing difficulty finding time and

support as the main reasons. These difficulties with CLP may have been perceived as leading to a disconnection with community and associations with the SSL program.

Figure 5.4 depicts a Word Frequency cloud for students' responses to questions about their CLP one year post program. Compared to the Word Frequency cloud for the end of program interviews there are a few more words with a negative connotation, such as "hard" and "work", which depict the reality of trying to bring a community project to completion, as compared to the excitement of planning the project remotely whilst at the SSL.

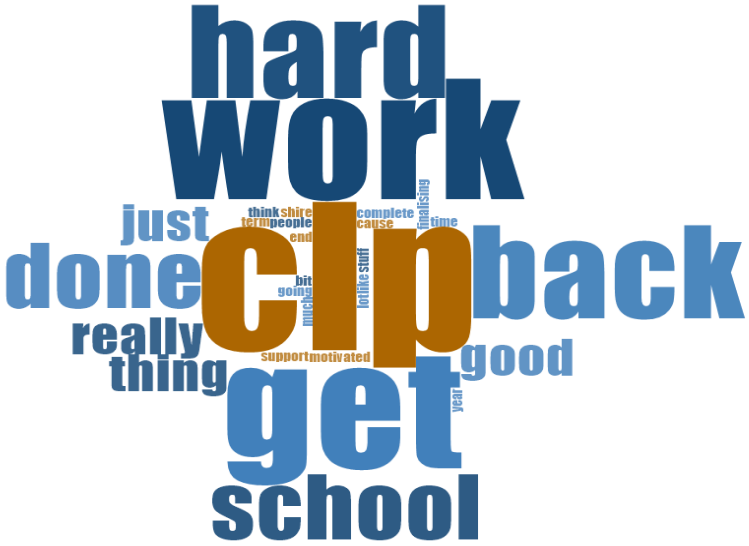

Figure 5.4: CLP word frequency - one year post program.

Participants who had completed their CLP did feel a sense of accomplishment and connection to community, demonstrating how important CLP completion can be:

After the team finished our CLP I found teachers and community members respected us for what we had done (SR3, F, 9).

One year post program, interviewees still perceived a strong connection to their peers from the program. They explained how they still kept in touch with participants from their school and other schools. Some participants reported feeling a little disconnected from their previous friendship groups upon return to their home school and many participants found the difficulty of CLP completion frustrating and possibly disconnecting from their community.

Summary of qualitative findings for research question 1b. The program still had positive impacts on participants in terms of the Five Cs one year post program, although these impacts appeared to have different foci than those at the end of the program. There

was a perception that the program had been of assistance with developing academic and leadership skills and in making connections with the other participants in the program. The areas of difference were in relation to the impact on public speaking and social competence, which had received relatively more mentions by end of program interviewees. Whist not all participants remembered details of all the classes, there were some classes that appeared to have had more of a lasting impact than others, particularly the Thinking and Learning classes. Most participants continued to be involved in leadership roles and felt the program had assisted with their success in this area. Some students mentioned disconnection from their previous friendship groups upon returning to their home schools and also from their school or community when faced with difficulties completing their CLP. While there was an overall perception that many skills had been gained as a result of participating in the SSL program, these tended to be discussed in more general terms than they had been at the end of the program.

Qualitative Findings for Research Question 2a

How do perceptions of development of the Five Cs differ between those participating in the five-week program compared to the nine-week program directly after their participation in the SSL program?

Figure 5.5 displays the percentage of participants who referenced each of the Five Cs by program length at the end of program interviews.

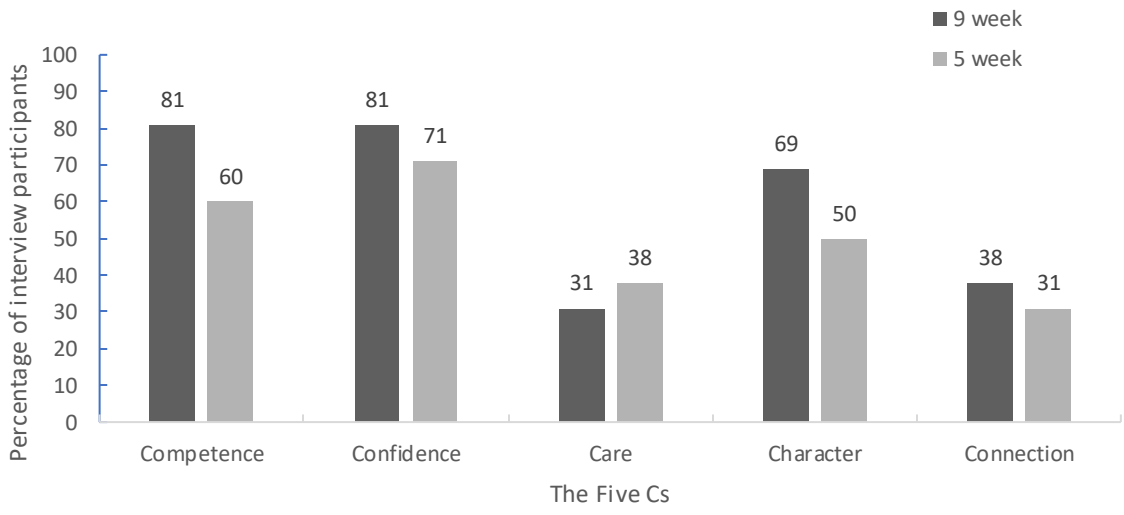

Figure 5.5: Percentage of interviewees by program length who referenced the Five Cs at end of program.

As illustrated in Figure 5.5, each of the Five Cs were mentioned more in interviews by participants in the nine-week programs than those in five-week programs, with the exception of Care. The following section includes an analysis of the similarities and differences relating to each of the Five Cs between participants in the two different programs.

Competence – qualitative findings for research question 2a. Competence was recognised in both the five-week and the nine-week programs as an important positive development from the program. This was the 'C' with the greatest difference between the five-week and the nine-week program, with 81% of nine-week program participants making reference to competence gained, and only 60% of the five-week participants.

Figure 5.6 displays the percentage of participants who mentioned different areas of competence

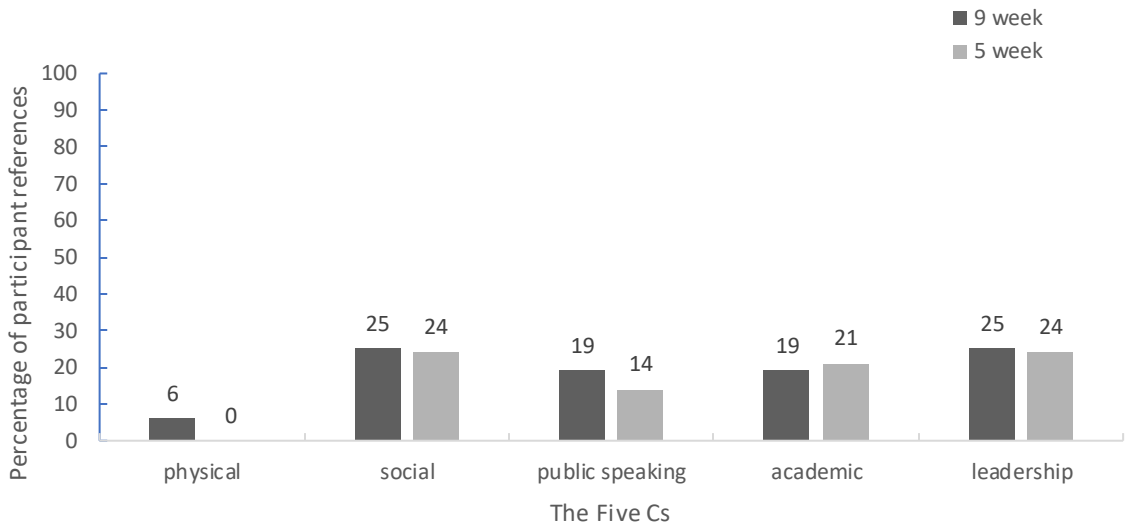

Figure 5.6: Percentage of interviewees by program length for areas of competence at end of program.

Although there was an overall difference of the number of references to Competence by the participants in the two program lengths, the type of Competencies to which participants referred were very similar, as displayed in Figure 5.6. Both groups developed positive competencies throughout their participation in the SSL program.

Confidence – qualitative findings for research question 2a. There was evidence of development in the construct of Confidence for participants in both the nine-week and the five-week programs. Seventy-one percent of the five-week participants and 81% of the nine-week participants spoke about their perceptions of their growth in Confidence in their

interview responses. Confidence was the most commonly mentioned of the Five Cs in the five-week program and equally most common with Competence in the nine-week program.

Examples of Confidence developed in each program can be seen in the following quotes from the five-week participants:

I think I've got more confidence in talking to people, and I've like broken away from my school I've met new people who I can have relationships with for life (DM, F, 5).

I was really quiet when I first came and now it has helped me step out of my comfort zone and into a new community and it makes you realise that it's really not that bad meeting new people. I thought it would be a lot harder (DJ, F, 5).

Everyone is just so openly accepting. And you can be yourself and everyone would love you for it. (DT, F, 5).

I've become confident as a leader, and I've become more social I suppose, like I'm not always in the corner being quiet, I'm talking to a lot more people (KB, F, 5).

I think one of the biggest thing would be learning more about myself (LL, M, 5).

Lot of confidence out of it. I was a very anxious person before this (M5, F, 5).

Confidence in yourself, 'cause you really learn the importance of being confident and that kind of thing. By confidence I mean, like being able to, I don't really know, being able to talk in front of people, but also just being able to make friends with new people, just not be shy and hide away till you're confident, kind of being out there a bit more (N2, M, 5).

These comments can be compared with those of the nine-week program participants.

Learning about myself has taught me a lot (C3, F, 9).

The whole confidence thing is definitely, sharing my opinions, has a lot to do with the fact that I feel more comfortable in the space now than I did at the start, I feel more comfortable with myself and I recognise what some of my beliefs and values are and the qualities that I have (C2, F, 9).

I think they will see me as a more confident person - so more confident in myself and what I do (E2, M, 9).

Both groups talked about feeling more comfortable with themselves and being able to talk to more people. They were more confident to share their opinions and try new things. There was no notable difference in interviews between the participants in the two different programs with reference to aspects of Confidence.

Care - qualitative findings for research question 2a. Care was the only one of the Five Cs where there were more references made in the five-week program (38%), compared

to the nine-week program (31%). Care was also referred to much less commonly than Character, Confidence and Competence.

Although there were overall less references to Care from the participants, the type of comments made about Care were very similar for both the five- and nine-week programs. There were slightly more comments about including others as a team in the nine-week responses, and more comments about being nice in the five-week comments. There were also more of the comments about gaining an understanding from beliefs and values in the five-week comments.

Some of the responses from the five-week participants referring to care were as follows:

Just being nice to everyone in the group, and not just saying, "Alright this is how we're doing it and I want you to do this this and this in the next five minutes." Be nice and give them some extra time. (BR, M, 5).

You've got to be nice to everyone, can't just hate people (BP, M, 5)

These were similar to the nine-week responses:

Think about others before myself (KJ, M, 9).

I've learned to just help, it would be best if you go help like if you could carry some this stuff rather than watching them struggling (EC, M, 9).

Whilst not referred to often by participants in either program, there were also no negative comments about Care.

Character – qualitative findings for research question 2a. Fifty percent of the participants interviewed in the five-week program mentioned Character and 69% in the nine-week program. There was evidence in both the five-week and the nine-week program of development of responsibility and maturity.

Some of the five-week participants noted in the one year post program interviews that they had gained a great deal of maturity from the program:

Maybe I'm a lot more mature now. It used to just be I'd just joke around and not actually do my work, now I sort of know where that line is, and when it's time to do my work (CQ, M, 5).

I've been more sociable, mature and I reckon it will continue to improve after Alpine School 'cause I'll get to use these skills (YS, M, 5).

Probably my behaviour has been brought right back in (UL, M, 5).

The five-week participants also spoke about increased responsibility:

Probably just little more get up and go, I'm naturally pretty lazy like just, probably I think I should start doing more chores around the house, be like more everyday doing routine, making a conscious effort to help, like I thought that was really hard but here you have to mop and scrub toilets and stuff (N2, M, 5).

Probably responsibility - so like from my own actions (W1, M, 5).

Similar comments on gains in maturity and responsibility were noted in the nine-week participant interviews:

I've gotten more mature, like instead of making fart jokes, I've just really stepped up more, is what I feel like (KJ, M,9).

I felt like I had a lot of responsibility and that was a really good thing, because they give you so much responsibility and cause your parents they usually do stuff for me, I don't have that same great responsibility that's on me all the time - so that impacted me quite a lot as well as my independence (E2, M, 9).

There were mentions of becoming more positive from participants in both programs. Some of the comments from five-week participants follow:

I was trying to keep a positive attitude towards schoolwork and homework and stuff 'cause it really helps. And so I just try and keep a positive attitude to it as much as I can (IC, M, 5).

Guess I've learned to turn things into more of a positive, like see it with the glass half full rather than the glass half empty, see things more positively, in a positive way, I haven't really seen many negatives and if there was you'd turn it into a positive or see ways you could improve on it (O2, F,5).

These comments were similar to the following nine-week participants' comments:

One of the things we haven't talked about too much, but we did on Expos, was the importance of being positive, I think at school, kind of look at the bright side, when things get hard (C3, F, 9).

You laugh at everything even if it's not funny, keep smiling, to maintain a positive attitude (HM, F, 9).

Before I'd be kind of negative towards things, probably didn't want to do things, kind of whatever. But now I have positive learning (IF, M, 9).

Participants also mentioned a perceived gain in understanding others and accepting diversity. Some of the five-week participants commented:

All the other people live like in Melbourne, we all kind of live and think in a really similar way, but with all the other country kids they live and think in such a different way and it's been pretty cool to see the different views and how everyone sees the world. (M4, F, 5).

Sort of hard to explain, but people aren't perfect, like when you spend lots of time with people you begin to see their bad things and that sort of makes them a bit more human (N2, M, 5).

The nine-week participants noted similar gains, as evident in the following comments:

It's been pretty cool to see the different views and how everyone sees the world. We're all the same but we're all different and it's been really cool to see the diversity (M2, F, 9).

My attitude towards, people, but it's the same attitude, just how I acknowledge people, how I get along with people, how I'm aware of everything that's happening (NH, F, 9).

Respect people like they respect you (UL, M, 9).

It is evident from the previous comments that there were similarities between the recognition of the development of responsibility and maturity in participants in both programs. Participants in both programs spoke of stepping up and developing their behaviour to be more positive. There was a distinct similarity in language use for both programs, including frequent use of the words "responsibility" and "maturity". The other features of the Character construct included positivity and a recognition of understanding of diversity as evidenced in the above comments by participants in both programs.

Language use and content did not vary greatly in the responses when discussing Character between the five-week and the nine-week program participants, with both groups acknowledging diversity and the importance of positivity. As evidenced by the interview data, there was a perception of the development of positive character traits emanating from participation in both the shorter and longer SSL programs.

Connection – qualitative findings for research question 2a. Thirty-eight percent of the nine-week participants mentioned Connection compared to 31% of the five-week participants.

Most of the Connection comments were about making friends. Although many of the participants thought they could make better friends in the longer program, the five-week participants generally still mentioned that they had made lifelong friends:

But I found one of the things I really enjoyed the most was hanging out with everyone and getting to know everyone individually. Like these are definitely going to be friends that we're going to see in the future (R3, F, 5).

Participants in the five-week and the nine-week programs were equally connected to their CLPs and felt that they would be successful in the completion of it.

Figure 5.7 is the Word Frequency diagram for CLP responses for participants in the five-week program, while Figure 5.8 represents the nine week program participants.

Figure 5.7. CLP word frequency – Five-week program – end of program interviews.

Figure 5.8 is the word cloud for nine-week responses

Figure 5.8: CLP word frequency – Nine-week program – end of program interviews.

There were definite similarities with the word frequency diagrams for the five- and the nine-week responses, with words such as "confident" and "good" featuring in both. All responses were positive and confident about CLP completion.

Connection developed through the SSL program was similar for participants in both the nine- and the five-week programs.

Preferred program length at end of program. In all interviews, participants were asked what they thought might be the differences between the five- and the nine-week programs. They were also often asked, "If you were the Principal and could choose between getting double the amount of students through and only running five-week programs, or always running nine-week programs, what would you do?" In addition to examining the responses which related to the Five Cs, participants' responses to this question and their subsequent discussion of program length was also examined for the qualitative findings. These responses were able to give not just an understanding of the different perceptions of development when program lengths were compared, but suggestions as to preferred program length from the participants and their rationale for these preferences.

Overall 60% of the interview participants said they would prefer a nine-week program, with 40% preferring a five-week program. When this was broken down into which program participants were involved in, the nine-week program participants were overwhelmingly supportive of the longer program (86% of participants preferred the nine-week program), whereas only 51% of the five-week participants said they would prefer a longer program.

There were a number of reasons participants gave for preferring the nine-week program. These included a more spread out, less congested program, a greater opportunity to form friendships and more opportunities for reflection. Alternatively, some participants regarded a five-week program as optimal as they would not miss as much of their home life, more students could access the program, it would be easier to reintegrate back to their home school, and simply that five-weeks was enough time to cover enough learning. Table 5.9 displays the number of responses from interview participants mentioning reasons for their preference for either a five- or a nine-week program.

Table 5.9

Reasons for Preferences of Program Length

Preferred Length	Reason	Number of references
5 week	Missing family, school, sport, work	25
5 week	More students could access the program	16
5 week	Learned enough in five weeks	18
5 week	Easier to reintegrate	4
9 week	Five weeks is too rushed	12
9 week	Build stronger relationships	24
9 week	Can absorb more learning	13
9 week	Learn more	9

Following are a selection of the comments supporting the reasons participants preferred either the five or the nine-week programs.

Reasons for preferring a nine-week program. There were 12 participants who mentioned that the program in five weeks was too condensed.

You've pretty much like jammed everything we've needed to know into this five weeks, so if we had the nine weeks, four more weeks, it would probably just be more spread out, and now it's all just in (B5, F, 5).

You would probably absorb more (B2, M, 5).

I wouldn't have had to rush my passport at the end, I could have done it a lot better and I could have finished work to a greater extent if we had have had more time (B1, M, 5).

It wouldn't be so compact, like, five weeks was really, everyone got really tired towards the end, with nine weeks it would be all spread out (DM, F, 5).

Twenty-four participants thought that five weeks would not be enough time to form very close friendships.

Nine week programs would be better, 'cause we just start to get to know all these kids by the five week mark, then we are leaving them, and it's harder for us to leave them at the five week mark, but if it was the nine week mark we would've got to know them, been friends with them and have those experiences with them, all our ups and downs, we would have left knowing we would definitely see you guys soon, knowing we had just come that much closer, but right now, we'll kind of leave and we've just got sort of comfortable (B4, F, 5).

We get to do everything and I just feel like with it stretched out you get to have better relationships with people and stuff like that. I wouldn't know about the other relationships but I just feel like it's easier to make relationships and get to know people better. (DL, F, 9).

There were 13 participants who were concerned that five weeks was not long enough for some of the content to become really embedded with them and enable reflection and change:

Just the time, you need the time to have the program to change your ways (C2, F, 9).

Five weeks would jam it all in and you wouldn't have time to think about it all, like nine weeks you have time to think about everything you've learned, like if you asked me that at five weeks I would be like I don't know (C3, F, 9).

The second half of the program is about reflection and what we've learnt in the first half of the program, putting it into practice, I think it just ties it all together, you wouldn't have time to do that (NP, F, 9).

Because you just get - like I don't really want to go home yet I feel like I can learn more and spend so much time here. Right now I want to see my family but I don't want to go home. I feel like I've missed out a little bit. I don't think I'd learn much more, but I could improve on what I've learned. Plus there's lots of stuff to go underground caves and stuff that I want to do (DT, F, 5l).

It's not just on the basis that I'd like to stay here with all my new friends, even though that is quite important to me still. I reckon it is that I feel like I'm missing out on a few of the classes that we haven't been able to do. But not just the fun experiences. The whole point of this place is to develop your leadership and your confidence and your capability in teams and I just think there are other classes and experiences that let you do that that we might be missing out on (KC, M, 5).

Reasons for preferring a five-week program. Students who supported the five-week program felt that it would be good to give as many students as possible the opportunity to attend. They felt like they had gained enough from the five-week program. Twenty-five participants spoke of the issues with nine weeks being such an extended length away from home and there would be too many issues of homesickness, as well as missing out on things like sport, school and friendships.

Because I think we're only 14/15 years old and I think nine weeks is a long period of time and I don't think anyone's really had, you know that chance to stay away from parents

and family that long and it is kind of like a hard thing to do. I reckon the five-week program is just the right amount of time to you know, be with a new family, basically (KK, M, 5).

I think I got a lot already out of the five weeks and I think if I had four more weeks it would still be a lot of fun, but I think I would miss all my friends like heaps more (MK, F, 5).

If it was a nine-week program, I wouldn't have come, it would have been too long for me to be away from family and friends I find the five-week program has taught me so much more than I would have learnt at school anyway. The five-week program is extremely helpful just for me alone. I mean the nine-week program, would be good, but it wouldn't be for me. I wouldn't even have thought about signing up. I couldn't do another month. But the things I've learned here will stick with me for sure (NC, M, 5).

It's kind of everyone's saying they want to be here the 9 week program, but I wouldn't have come if it was nine weeks, missing out on too much work and sport, footy (NT, M, 5).

Heaps of schoolwork, especially leading into Year 10, a lot of people are doing VCE subjects (N1, M, 5).

Well I've gone around and asked people this, some of the girls, they said they probably wouldn't be able to do it 'cause they would be missing out on so much at home and nine weeks would be a long time and missing their families would be the biggest things (B5, F, 5).

There were students who recognised the potential to open the program up to more students if five-week programs were run:

It's sort of good though, cause it means there are more people you can fit into a year, and more people get educated (B2, M, 5).

I would do double, so double the amount of students get the opportunity and the experience, and it's still time - like if it were a week it's not big, but four to five weeks is a good time (N3, M, 5).

Eighteen of the five-week participants felt satisfied that they had achieved much from the program even thought it was shorter than the usual nine-week program.

I think the five weeks was probably good, I feel like I've achieved everything I set here to do and to be honest in this last week I've started getting a bit sick of people and I want to go and see my friends and family (N4, F, 5).

I just feel like I've done everything that I wanted to do and I don't think there's really much more I would get in another four weeks if I was here for that extra (N4, F, 5).

I guess five weeks is just as good, 'cause you realise that you're only here for five weeks, you have to make the most out of it. So there's none of that, like, what the first three weeks just sticking by your school group and everything. It's like, once you hit the second week, it's like right, I have a job to do, put yourself out there, get to know the people, cause I only have three weeks, and once you hit three weeks you are more than half way and it has gone so quick. It makes people come out of their shell a lot quicker and we all bond a lot sooner (EP, F, 5).

One student had the forethought to think about the reintegration back to home school, thinking that it would be easier after a five-week program.

'Cause it's more, it's not so much like a home here, and it's a bit I'd say the transition from here to home is easier (TD, M, 5).

Summary of participants' preferences regarding program length. The following comment presented an interesting discussion from one participant. It presented the issues with some students choosing not to participate in a longer program, but realising that there could be more value from a nine-week program:

I think the bonds with everyone would've been closer, especially with the teams, like if we did our second Expo, like that sort of thing. Maybe the classes would not be as, like sometimes the classes get really squished - like when they put the two lessons together, just more spread out. But the thing is, I probably wouldn't have come if it was nine weeks, cause I was really scared about missing five weeks of soccer and then my Coach said You'll be alright, I'll send you some drills and stuff. I might have applied for the nine weeks, but I think the five weeks suited me. But if I were the Principal I would probably go with the nine weeks. Before I came here I was like oh yeah, five weeks, you could get lot more students through, but when I came here, it's good to spread it out and have that time, like they would still get work and it would still be an advantage, but really rushed (NA, F, 5).

There were mixed feelings amongst the participants about the different program lengths, as can be seen in the range of comments above. For 40% of the students, the five week program was preferable for a number of reasons, both personally and educationally. They believed that they could achieve just as much in a five-week program and more students would have the option of attending the program. Twenty-five students also felt that the nine weeks may be prohibitively long for many, particularly those worried about homesickness or missing out on sport, school or work. On the other hand, 60% of students felt that the nine week program offered more of an opportunity to get to know the other

students and was a less rushed program. There would be more activities offered in the nine week program and the content could be more thoroughly delivered.

Summary of qualitative findings for research question 2a. Participants in both the five- and the nine-week programs spoke positively about their development of the Five Cs from the program. They showed relatively equal responses in positive development of all the Five Cs. Competence, Confidence and Character were developed more strongly than Care and Connection for participants in both programs. Participants in the nine-week program referenced all the Five Cs slightly more than the five-week participants, with the exception of Care. Competence was the most notably different. However, when comments were further explored in the interviews, there was little difference in what was being said between the programs. When asked about program length, 60% of students said they would prefer the nine-week program. There was also a larger difference in responses from participants in different length programs. Half of the five-week participants felt that five weeks would be the preferred program length. There were a variety of reasons provided for whether a five-week or a nine-week program is optimal.

Qualitative Findings for Research Question 2b.

How do perceptions of development of the Five Cs differ between those participating in the five-week program compared to the nine-week program one year after completion of the SSL program?

Figure 5.9 displays the percentage of participants who referred to each of the Five Cs for the five and nine-week programs from the one year post program interviews.

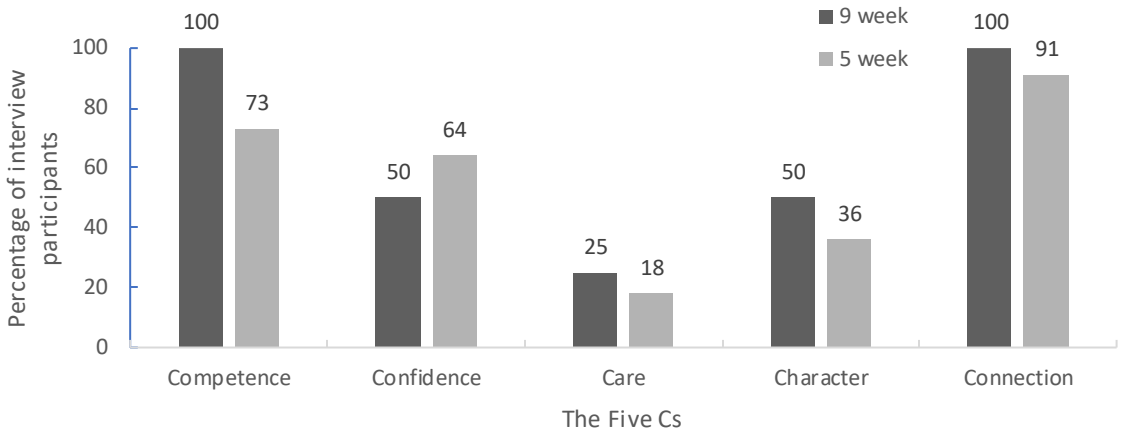

Figure 5.9. Percentage of interviewees by program length who referenced the Five Cs one year post program.

The nine-week program was only slightly higher than the five-week program in all categories with the exception of Confidence. When the interviews were examined, there appeared to be little difference in the responses one year after between participants in either program. Language and content was used in a very similar manner by participants in both the five and the nine-week programs.

Competence - qualitative findings for research question 2b. Participants in both the five- and the nine-week programs mentioned a gain in academic competence after the program. Participants from both programs mentioned particularly the Thinking and Learning lessons and being able to use these back at school. They mentioned being more organised and independent with their learning. They were better able to speak in public and had taken on more leadership roles, regardless of which length program they participated in.

Confidence – qualitative findings for research question 2b. Students in the five-week program mainly stated that their Confidence had been boosted, particularly their ability to talk to more people. Some of the selected responses from five-week participants demonstrate this:

I reckon the main thing from the experience was communication skills and talking to people and getting to know people and having conversations and stuff (B4, F, 5).

Getting along with everybody and being confident, also learning values and beliefs, knowing and understanding my beliefs and values (B5, F, 5).

I think I can make friends easier and hold a conversation better than what I used to. And also other experiences, but I'm not sure what's Alpine and what's other experiences (B1, M, 5).

This was displayed as the same understanding of Confidence in students who participated in the nine-week program.

As in I'm better at communicating with people, I'm better at putting myself out there and I can get to know people more easily than I could before (M2, F, 9).

There was very similar language and content when talking about Confidence between participants in both length programs one year post program.

Care – qualitative findings for research question 2b. There was little reference made to Care in interviews from participants in both programs. Only 18% of the five-week participants and 25% of the nine-week participants made reference to Care in their one year post program interviews.

Character – qualitative findings for research question 2b. Character was only mentioned by half of the nine-week interview participants and just over a third of the five-week interview participants. Those that did comment on Character spoke of a growth in maturity due to the program. They also spoke about being able to better handle conflict and giving everyone a fair go. This was similar for participants in both length programs, with no notable difference between the programs.

Connection – qualitative findings for research question 2b. Participants in both programs were still connected with their peers a year post program. Regardless of location, they had had catch ups and regularly chatted on Facebook. This was identical for participants in the five-week and the nine-week program. Although some of the participants spoke about being able to make better connections with a nine-week program, the five-week participants were still keeping in touch with others from their program.

There was no pattern to CLP completion rates between the two different length programs, with difficulties faced by students from both programs, leading sometimes to a disconnection with community and the school.

There was little difference on the impact on Connection between participants in the five and the nine-week programs.

Preferred program length one year post program. When asked about which program they would prefer all the participants in the nine-week program responded that the nine-week program would be preferable. Of the five-week program participants, 60% would

have preferred the longer nine-week program. The main reason stated for this is that it would have given them more of a chance to bond with the other students:

Five weeks is a lot shorter than nine weeks in comparison really. You probably still get to make those bonds with people but you don't really get to make them as strong as you would with nine weeks, which was something that was really important to me. (DL, F, 9).

I don't think you would get as much out of five weeks, at nine weeks everyone knew each other, but at five weeks you don't know everyone and don't socialise with everyone there, you are not as close. Friendship is one of the main priorities of the program, it helps with your leadership and stuff (HC, M, 9).

One student spoke about the extra time allowing for more shared experiences and becoming more comfortable:

I feel like I would have gotten more out of a nine-week program because it took me a while to get comfortable, and being more comfortable would have allowed me to be more outgoing and develop stronger connections through more shared experiences. (SR10, F, 5).

Other reasons included spending more time with the classes:

Everything's a lot more compacted so you get less time to do your passport, less time to do other things, the classes would be a lot more full on. Our classes were a lot more spread out, we didn't have to rush things, we just got to take the time to relax and do it at our own pace really (DL, F, 9).

A supporter of the five-week program noted that transition would have been more difficult with a longer program and five-weeks was ample to get something of benefit from the program:

I think I got the exact same out of it as someone who had have done the nine-week program. I got what I wanted to get out of it, but a second Expo and more activities like the caving would have been good, but I think nine weeks would have been even harder to come back from (NJ, F, 5).

One participant noted that nine weeks would probably not be more 'bang for your buck':

I don't think having nine weeks would have changed us double what the five weeks did, just a little bit (M5, F, 5).

Another made the comment that in five weeks students may concentrate a bit more, with less time to achieve everything:

I think the five weeks made us appreciate it a little bit more (M4, F, 5).

One participant was still of the opinion that nine weeks would have been too long away from home and would make reintegration even more difficult:

The five week was good enough to learn enough - it was long enough. I wouldn't have enjoyed the nine week as much, I would have missed too much. It would have been harder coming home, but it was rushed (R1, M, 5).

There were some who felt that five weeks had definitely made enough of an impact on them:

I think the five week one is long enough really. I still got lots out of it. Without having visiting weekend it was long anyway, I learned enough. I reckon it has genuinely made an impact on me. I've made new friends and opened up to people I wouldn't have otherwise (UE, M, 5).

Like the comments made in the final week of the program, the participants still had mixed feelings about program length one year post participation. Some felt that five weeks was rushed and not enough time to form lasting meaningful friendships and really get a grasp of what is being taught, whereas others felt that five weeks was enough to make a lasting impact and nine weeks would be too long to spend away from home, meaning they may not have even chosen to participate.

Summary of qualitative findings for research question 2b. The interviews conducted one year post program showed little difference in perceptions of program impact when the Five Cs were examined. Participants referred to similar impacts and the content and language used in the interviews was almost identical between the participants in the two program lengths. Participants referred more often to impacts made on Competence, predominantly academic and leadership competence, Confidence and Connection and fewer references were made regarding the impact on Character and Care. Participants had differing thoughts on the ideal program length with a range of reasons supporting both the five and the nine-week programs. These included the ability to form closer bonds and make more of a lasting impact in the nine-week program as compared to being able to offer the program to more participants and easier reintegration for the five-week program.

Qualitative Findings for Research Question 3a.

How do perceptions of development of the Five Cs differ between female and male participants directly after their participation in the SSL program?

In the qualitative findings for research questions 1 and 2, the group interviews were treated as individual interviews. This was not possible to do for research question 3a and 3b,

as the group interviews were often mixed gender groups. Therefore, the qualitative findings for research questions 3a and 3b used only the data from the individual interviews. There were 22 females and 25 males included in this analysis. Figure 5.10 shows the percentage of participants of each gender who referenced each of the Five Cs during the individual interviews at the end of the program.

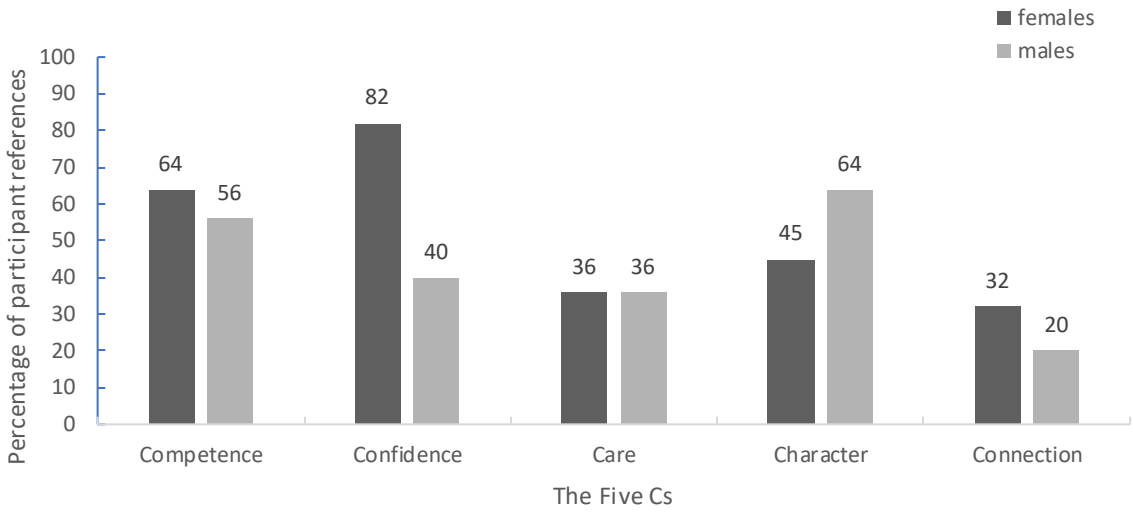

Figure 5.10. Percentage of interviewees by gender who referenced the Five Cs at end of program.

It can be seen from Figure 5.14 that there were quite distinct differences with regards to Connection, Character and Confidence. There was a less noticeable difference in terms of Competence and no difference in Care. The females mentioned all of the Five Cs with the exception of Character and Care more frequently than the males. Each of the Five Cs was then examined in detail.

Competence – qualitative findings for research question 3a. Sixty four percent of the female students and 53% of the male students mentioned Competence. Although these figures were similar, when broken down further there were notable differences in the types of Competence mentioned by the different genders. Males mentioned public speaking competence, whereas females felt they had gained more Competence socially and in leadership skills. This is depicted in Figure 5.11.

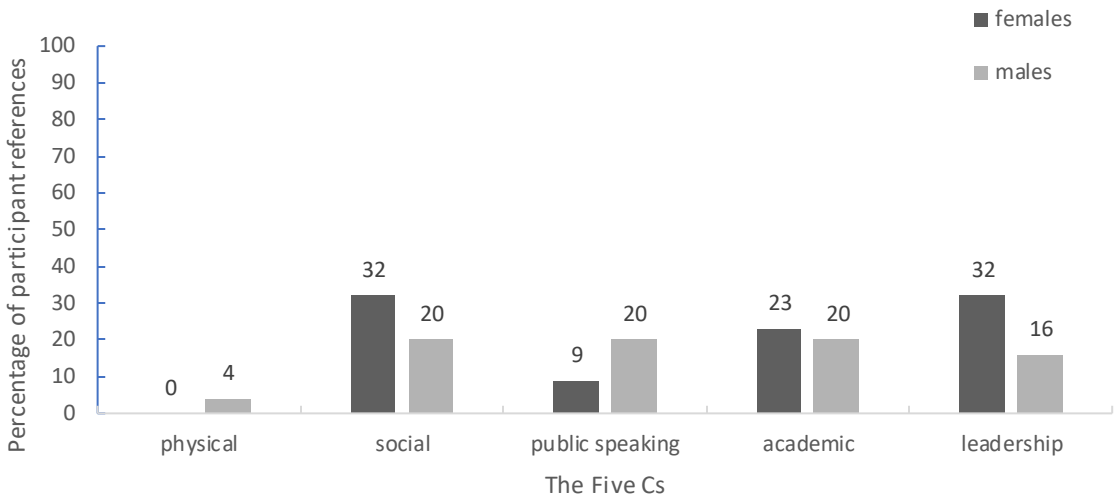

Figure 5.11. Percentage of interviewees by gender for areas of competence at end of program.

Confidence – qualitative findings for research question 3a. Eighty two percent of females and only 40% of boys talked about Confidence. The females particularly related Confidence to peers and relating to others, as the following comments illustrate:

I'm more comfortable in myself, and I can talk to everyone else a lot easier. Like at the start I couldn't even talk to my roomie, but then I started to realise that I could come out of my shell, and be confident and I talked to people I hadn't talked to before. And now everyone is like a family. (UC, F, 5).

Before I came here I would only hang in my group at school, but being here I've learned that I can make friends with more people. (DT, F, 5).

The males tended to relate Confidence more to activities, rather than relationships.

I feel like I can lead a group and have the confidence to make decisions, like on Expo when we had to decide our roles, and I had the confidence to be the group leader. (IC, M, 5).

Confidence was the construct with the greatest gap between genders. Whilst almost all of the female participants referred to Confidence as a perceived gain of the program, less than half of the male participants mentioned Confidence.

Care – qualitative findings for research question 3a. Mentions of Care were identical for both males and females who were interviewed, with 36% mentioning Care. When Care was referenced, there were no notable differences in the content between the male and female responses.

Character – qualitative findings for research question 3a. Whilst 64% of the boys referred to Character, only 45% of the girls referred to it. However, when these comments were further broken down, as displayed in Table 5.7, it can be seen that the discrepancy was largely due to a number of boys referring to a growth in maturity, which could be attributed to positive character development.

Table 5.10

Percentage of Times Aspects of Character were Mentioned by Gender

Reference	Percentage mentioned – males	Percentage mentioned - females
Maturity	32	5
Responsibility	20	23
Understanding of others and dealing with conflict	8	5
Positivity	24	36
Diversity	12	14

Many of the males perceived a growth in their maturity as a major gain from the program:

I've learned to control my temper, and be more mature with stuff (UL, M, 9).

I sit and listen a bit more now and act a bit more responsibly, like with maturity (TD, M, 5)

Compared to 32% of the male participants, only 5% of the female participants mentioned a growth in maturity as a gain from the program. However, 36% of the females referred to learning to be positive, with only 24% of the males referring to this. There was a definite difference in aspects of character development perceived by the different genders.

Connection – qualitative findings for research question 3a. Only 30% of the female students and 20% of the male students spoke about Connection. The number of references made by females to males, however, was double – 16 references compared to 8. From this it could be found that although not often mentioned, when it was, the females were more eloquent about their perceptions of Connection gained from the program.

The CLP was perceived to be an important factor for the participants in terms of Connection to community and school. Depicted in Figures 5.12 and 5.13 are the word frequency figures when speaking about their CLPs for both females and males respectively.

Figure 5.12. CLP word frequency - females – end of program.

Figure 5.13. CLP word frequency– males – end of program.

Notable from these word frequency diagrams, was that words such as "school" and "people" appeared at relatively the same frequency for males and females. The Word Frequency figures appear very similar for both genders.

Summary of qualitative findings for research question 3a. There were many similar responses from males and females in the end of program interviews. The major differences that did exist were in response to the development of maturity, leadership and physical and academic competencies. These were mentioned more often by the male participants. The female participants, on the other hand, spoke more of the development of

relationships and connection with peers. The female participants also spoke more frequently about gains in Confidence from the program.

Qualitative Findings for Research Question 3b.

How do perceptions of development of the Five Cs differ between female and male participants one year after completion of the SSL program?

There were individual interviews with six females and five males one year post program. The percentage of participant references for males and females one year post program is depicted in Figure 5.14

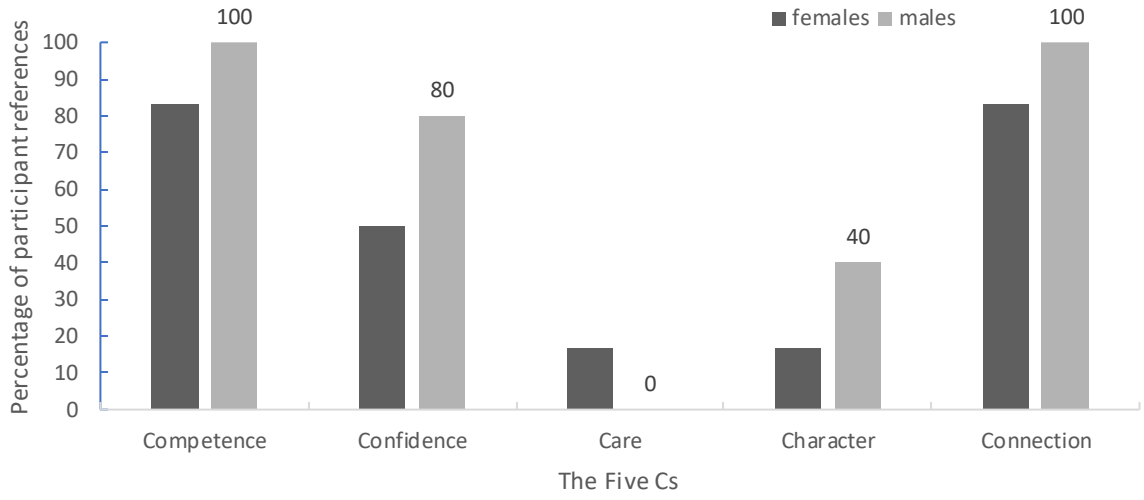

Figure 5.14. Percentage of interviewees who referenced the Five Cs one year post program.

Unlike the end of program interviews, the males who responded referred to all of the Five Cs, with the exception of care more frequently than the female respondents. The greatest difference in responses was to Character, Care and Confidence. It should be noted that unlike the end of program interviews, these responses are from quite a small sample (*n* = 11).

Competence – qualitative findings for research question 3b. Competence was mentioned by nearly all of the respondents, with 83% of the females and 100% of the males referring to it. When further examined it can be seen that the type of Competence referred to was very similar for both male and female participants as depicted in Figure 5.15.

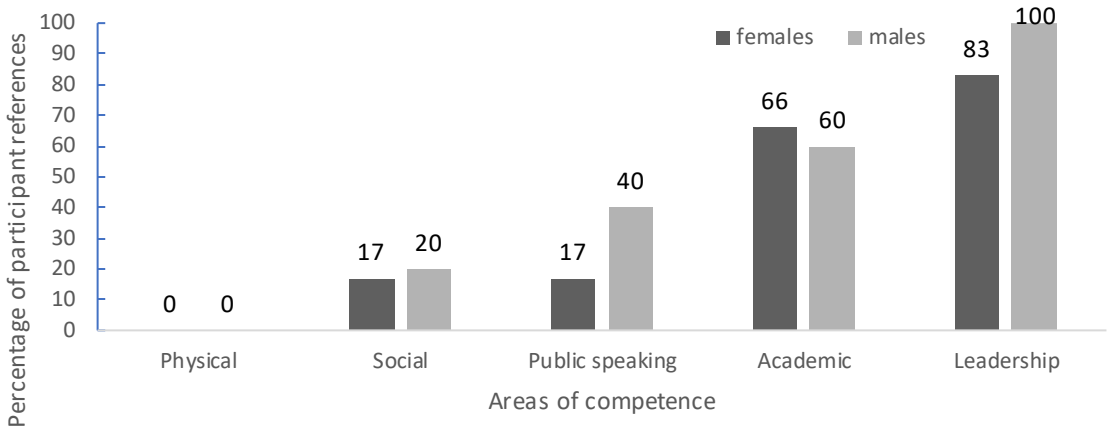

Figure 5.15. Percentage of interviewees by gender for areas of competence one year post program.

Figure 5.15 shows that academic and leadership competence were skills which participants saw as an important result of the program. This was not discernibly different for the male and female participants, which indicated that development of Competence was largely similar for both genders.

Confidence – qualitative findings for research question 3b. Fifty percent of the females and 80% of the male participants referred to a growth in Confidence. The females referred to the development of Confidence in terms of relating to their peers and the males in terms of overall Confidence and the ability to step out of their comfort zone. This was a turnaround from the end of program interviews when the female participants surpassed the male participants in their references to Confidence. The difference in the references to Confidence can be seen in the following quotes, the first from a female participant and the second a male participant:

I learned to just be me and then I can have the confidence to talk to my friends and teachers about a whole range of stuff (HM, F, 9).

I can do things I didn't really feel comfortable doing before, like presentations in class and different sports and stuff (UE, M, 5).

Care – qualitative findings for research question 3b. Care was only referred to once, by a female participant, indicating it did not have a major effect on either gender.

Character – qualitative findings for research question 3b. Character was not referred to often by the females nor the males. Corresponding to the responses at the end of

the program, most commonly the two boys who did refer to Character, referred to a growth in maturity. This was evident in the following comment:

I think I have learned to be wiser and more mature, I know when to step up and stop doing dumb things (BR, M 5).

Connection - qualitative findings for research question 3b. Eighty-three percent of the females and all of the male participants mentioned Connection in their one year post participation interview. Both genders referred to Connection with peers as a lasting effect of the program, stating that they had kept in touch with their co-participants and strengthened friendships as a result of the program. The references to Connection were very similar for both genders.

Summary of qualitative findings for research question 3b. Although there were some small differences in the number of references to the constructs of the Five Cs, overall, there was little difference in the effects of the Five Cs according to gender one year post participation in the individual interviews. The male participants grew in perceived development of Confidence, when compared to the end of program. Like the end of program interviews, the male participants perceived their growth in maturity as a development of the program, and the female participants more often referred to a growth in their ability to handle relationships with their peers.

Chapter Five Summary

This chapter provided findings from the analysis of the qualitative data in relation to the research questions. Overall the participants perceived that they had developed positively in terms of the Five Cs. There were some differences in the perceptions of development of the different constructs. At the end of the program participants referred most often to their Confidence, Competence and Character. One year post program participation, Confidence and Competence still featured as key positive developments from the program, with the addition of Connection. There was little notable difference between the interview responses in terms of the Five Cs for participants in the five-week and the nine-week programs. Participants were divided in their responses to their preferred program length, with a variety of reasons given for each of the options. There were some discrepancies between male and female participants in their perceived development during the program. The females at the end of the program mentioned growth in Confidence significantly more often than the males, however, this was reversed one year post program. Although the number of references to the other constructs were fairly similar for males and females, the types of

responses were somewhat different. The female participants focussed more on development of relationships and social skills, whereas the male participants focussed on building of skills, leadership and maturity. The following chapter provides a summary and triangulation of the findings of both the qualitative and quantitative data.

Chapter Six: Triangulation of Qualitative and Quantitative Findings

In this chapter, the qualitative and quantitative findings are triangulated and presented in relation to each of the sub research questions. Through a process of triangulation, the findings of the qualitative and quantitative data were merged to provide convergent validation (Fielding, 2012). The process of triangulation is somewhat controversial in some research circles, as it has been seen to confuse constructivist and positivist paradigms (Mertens & Hesse-Biber, 2012; Denzin, 2012). However, as discussed in Chapter Three, triangulation in this study provided the opportunity to gain a deeper understanding of the data and associated findings (Hesse-Biber, 2010; Johnson & Onwuegbuzie, 2004) and is an important step in any concurrent mixed methods study. Fielding (2012) advocated using the process of quantifying qualitative data, as has been done in the current study, to allow for a more complete understanding of the research. The qualitative data were quantified by using a process of quantifying coding and creating theme tables. In addition to this, comments from participants were utilised to illustrate concepts from the data in detail. The use of student voice enabled elaboration of many aspects of the findings. The results from the qualitative data were then compared to the quantitative data. Following is a summary of the results of this triangulation and a snapshot of the findings relating to each of the research questions. These are then discussed in relation to the overarching main research question in the following chapter.

Triangulation of Research Question 1a

In what ways do students at the SSL perceive their development in relation to the Five Cs model of PYD, namely Character, Competence, Connection, Confidence and Care, directly after their participation in the SSL program?

The quantitative data demonstrated that there was a statistically significant positive difference in perceptions of the program on all of the Five Cs, but effect sizes were varied. There was shown to be a moderate effect on Confidence, Competence and Connection, and only a small effect on Care and Character, with a moderate effect overall on PYD.

The qualitative data also supported a perception by participants of the program having had a positive impact on development in relation to all of the Five Cs, with the strongest impacts being on Confidence, Competence and Character, and a lesser impact on Connection and Care.

When data were triangulated, it was evident that involvement in the program had a positive impact overall on perceptions of PYD when measured at the end of the program. It

had the greatest perceived impact on Confidence and Competence and a lesser impact on Character, Connection and Care.

Triangulation of Research Question 1b

In what ways do students at the SSL perceive their development in relation to the Five Cs model of PYD, namely Character, Competence, Connection, Confidence and Care, one year after completion of the SSL program?

When comparing the quantitative data from the start of the program to one year post program, there were only statistically significant differences for PYD, Confidence and Competence, with only a small positive effect on PYD and a moderate positive effect on the constructs of Confidence and Competence. There was no statistically significant difference between ratings at the start of the program and one year post program in relation to perceptions of the constructs of Character, Care or Connection. There was no statistically significant difference in ratings for any of the Five Cs, with the exception of Connection between the end of the program and one year post program. The ratings in relation to Connection exhibited only a very small effect size of $d = 0.19$. This was in fact a negative effect, meaning the scores for Connection decreased between the end of program and one year post program participation. Although this was also the case for PYD overall, and for Confidence and Care, Connection was the only construct that measured a statistically significant difference between the scores at the end of the program and one year post program, albeit with a very small effect size.

According to the analysis of the qualitative data, one year post program participants perceived that the program had the greatest impact on their Competence, Connection and Confidence, with a lesser impact on Character and Care. They reported feeling more competent in terms of academic and leadership skills and were still connected to their peers and the program. They perceived a greater understanding of self and higher self-esteem which led to greater confidence. However, participants also reported experiencing some feelings of disconnection to the SSL and their home school, when difficulties completing their CLP were encountered.

When triangulated, the results of the ratings for the program one year post attendance, exhibited a moderate positive impact on Confidence and Competence. Care and Character were perceived as being less impacted longitudinally by participants. Moreover, the overall score for Care was marginally less one year post program than at the beginning of the program. The quantitative data and the qualitative data contradicted each other with

regard to the construct of Connection. Although scores in relation to Connection declined between the end of the program and one year post program with a statistically significant difference, they were still stronger than at the beginning of the program. However, positive references to the construct of Connection increased in the qualitative data one year post program. Certain aspects of Connection, including social connection were perceived as stronger one year post program. The differences in the qualitative and quantitative results are discussed in Chapter Seven.

Triangulation of Research Question 2a

How do perceptions of development of the Five Cs differ between those participating in the five-week program compared to the nine-week program directly after their participation in the SSL program?

The quantitative data demonstrated no statistically significant difference in ratings for development of the Five Cs between those participating in the five-week and the nine-week programs. The qualitative data supported this as interviews contained similar numbers of references, context and language in regard to perceptions of the Five Cs between the participants in the different length programs. The participants did, however, have some preferences as to which length program would be ideal. There were mixed responses to this question, with 86% of the students who participated in the nine-week program preferring the longer program and only 40% of the five-week program participants believing that the nine-week program was preferable.

Triangulation of Research Question 2b

How do perceptions of development of the Five Cs differ between those participating in the five-week program compared to the nine-week program one year after completion of the SSL program?

No statistically significant difference was found in the quantitative data between ratings of five-week and nine-week participants in relation to any of the Five Cs or PYD one year post program. There was also no discernible difference between the themes emerging from interviews of the five-week and the nine-week program participants one year post program. Participants did have mixed views about the ideal program length, with all of the nine-week participants and 60% of the five-week participants preferring the nine-week program. There was a higher percentage of participants in both the five and nine-week programs than at the end of program interviews, who preferred the longer program.

Triangulation of Research Question 3a

How do perceptions of development of the Five Cs differ between female and male participants directly after their participation in the SSL program?

Although the quantitative data showed there was no statistically significant difference between the genders for overall PYD, some statistically significant differences were found in relation to the constructs of Competence, Confidence and Character, albeit with very small effect sizes. The interview data showed that females mentioned all of the Five Cs more often than the males, with the exception of Character. This was due to the males mentioning an increase in maturity more frequently than the female participants. A notable difference was the mentions of Confidence, with 82% of the females and only 40% of the males mentioning it during interviews. The aspects of the construct of Confidence that female participants referred to was largely related to preceptions of relationships with peers.

Triangulation of Research Question 3b

How do perceptions of development of the Five Cs differ between female and male participants one year after completion of the SSL program?

The quantitative data demonstrated no statistically significant difference for gender in perceived development for any of the Five Cs over the three time periods, although there was found to be a statistically significant difference for gender for PYD over the three time periods, with a very small effect size. The interview data also demonstrated very little difference in terms of references to the Five Cs between the genders one year post participation.

Summary of Triangulation of Findings

The triangulated findings from these sub research questions were further examined to help answer the overarching research question: *How does participation in an alternative residential education program impact on positive youth development in adolescents?* The findings are analysed and discussed in the following chapter, where this main research question is addressed. Following discussion of the research findings, a set of recommendations stemming from this discourse is presented in Chapter Eight.

Chapter Seven: Discussion

In this chapter, the results from the data analysis in Chapters Four and Five and the triangulation from Chapter Six are examined and connected to the literature presented in Chapter Two. A discussion of the implications of these results is presented with regard to the research questions.

The needs of adolescents and how well the SSL program is perceived as catering for those needs from a PYD standpoint are discussed. The analysis of the data demonstrated that the SSL was perceived by participants as positively impacting each of the Five Cs – Confidence, Competence, Character, Care and Connection and the impact of each of these constructs is further examined using the research findings. Possible reasons for the different impact on each construct are also explored.

The findings in relation to each of the sub-research questions relating to the length of program, longitudinal impact and gender differences are also examined in this chapter. The differences between the five and the nine-week programs are discussed and further implications of perceptions of these different program lengths explored. In addition to this, the long term impact of the program one year post attendance is examined. A discussion of the difference in perceived outcomes for males and females is also presented. The discussion draws meaning from the findings through examining them in relation to existing research and literature and explores possible ideas and reasons for some of the findings.

Throughout this chapter, representative comments have been chosen to illustrate student voice. These comments are additional to the ones provided in Chapter Five. As this research stemmed from a constructivist paradigm (Lincoln & Guba, 2000), it was important to recognise student voice (Hart & Nolan, 1999; Mack et al., 2009). By doing this, the findings provided rich data and subsequently scope for detailed discussion. This current study relied not just on the empirical data from the questionnaires, but the interview data, which provided possible explanations for some of the findings.

Discussion of Research Question 1a.

In what ways do students at the SSL perceive their development in relation to the Five Cs model of PYD, namely Character, Competence, Connection, Confidence and Care, directly after their participation in the SSL program?

Adolescence and Positive Youth Development. Contemporary adolescent developmental theory focuses on both the physical and the socio-emotional development of the adolescents (Lerner & Castellino, 2002; Steinberg, 2005). Adolescence is recognised as

a key developmental stage and specific needs of adolescents have been identified (Eccles & Gootman, 2002; Bahr & Pendergast, 2007). These needs include allowing adolescents to take risks within controlled boundaries, providing connections with peers, family and communities, building skills and providing challenges (Bahr & Pendergast, 2007; Bellhouse, 2004; Carr-Gregg & Robinson, 2017; Eccles & Gootman, 2002). Adolescents need to be provided a nurturing environment where they can safely establish relationships and be willing to take on new challenges, all the time establishing their independence. Much literature has focused on how to best deliver such an environment for adolescents (Arnett, 1999; Benson, 1997; Carnegie Council, 1995; Cole, 2006; Cole et al 2006b). The SSL program, developed by the Victorian Government, was specifically designed in order to provide such a setting for middle school students, in order to address some of their developmental needs, and to increase school engagement for Year 9 students (DEECD, 2006). The growing movement of positive psychology and PYD has been linked with adolescent developmental theory (Lerner et al., 2011; Roth & Brooks-Gunn, 2000). This movement focuses on the development of strengths and positive traits in adolescents, rather than fixing the problems of adolescents (Pajeres, 2009) and is strongly linked with the development of adolescents (Eccles & Gootman, 2002; Lerner et al., 2005).

The framework of positive psychology and in particular, PYD (Lerner et al., 2005), was chosen for this study as it correlated well with the goals and aims of the SSL (SSL, 2000-2012). There was a dearth of research in Australia relating middle school programming to PYD. Many programs for adolescents in the past have focussed on issues such as delinquency, truancy, disengagement and substance abuse (Carnegie Report, 2005, Eccles & Gootman, 2002, Lerner et al., 2000; Rich, 2003; Roth & Brooks-Gunn, 2000; Shek et al., 2013). The SSL was not established as a place to send troubled youth, nor a place to fix the problems of Year 9 (DEECD, 2006; Margetts, 2010; Alpine School, 2002-2004). Instead, it was founded to promote student leadership, personal growth and enterprise (Alpine School, 2002-2004). Indeed, the view of the school has always been to develop students and promote their areas of strength, rather than viewing students from a deficit viewpoint. It is this focus that is congruent with the PYD movement and hence this study has been able to augment other PYD literature and research into adolescent needs (Lerner et al., 2005; Eccles & Gootman, 2002).

The SSL has been largely successful in terms of engaging students as demonstrated by continuous and strong positive school performance data (SSL, 2000-2012). Previous

research from a student perspective also indicated positive engagement (Dyson & Cairns, 2001, Dyson & Zink, 2007; Dyson & Zink, 2008; Dyson & Plunkett, 2010; Dyson & Plunkett, 2012; Schneider, 2017). This research was supported by parent and teacher data (Dyson & Plunkett, 2010: Dyson & Plunkett, 2018). A body of previous specific research thus supported the perception that the SSL program was catering well for the needs of the adolescent participants. The qualitative and quantitative data from the current study showed positive perceptions from the participants regarding their development of PYD, as summarised in Tables 4.7 and 5.3.

The SSL program was designed specifically with the learning and socio-emotional 'needs' of adolescents in mind (Alpine School, 2002-2004). Aspects of the program which cater specifically for adolescents include small group sizes, challenge, building relationships and meaningful learning (Bellhouse, 2004; Eccles & Gootman, 2002). It is the relationship between a program such as the SSL and perceptions of PYD from the participants that can be seen to expand connections between adolescent developmental theory and PYD.

PYD and the SSL. The measure of PYD in this study examined the participants' perception of their development regarding the Five Cs – Confidence, Connection, Competence, Care and Character. This was derived from work conducted in the United States by Lerner and his colleagues (2005), whereby extra-curricular youth programs were evaluated over a period of time for positive development in these five areas. Lerner et al.'s (2005) research was undertaken with more than 7000 students over the period of a decade, providing a robust framework for the current study. The survey that was used was adapted from Lerner's research, and had solid statistical reliability and validity (Geldhof et al., 2014b).

The SSL program in the current study had an overall statistically significant impact on perceptions of PYD when measured at the beginning and conclusion of the program, with a moderate effect size, as referred to in Table 4.7. The impact was particularly significant for the constructs of Competence, Confidence and Character, as illustrated in Figures 4.2, 4.3 and 4.5 respectively. Participants were also able to articulate positively in interviews about their perceived development in all of these areas, particularly in terms of their development of Confidence, Competence and Connection, as demonstrated in Table 5.3. Some representative comments which illustrated this perceived development included:

I think just learning about myself and all that sort of stuff, like what leadership qualities I possess, and what qualities I have, and goals and all that sort of stuff (C1, F, 9).

I'm so much more confident now – I know what I can do and I would have never been able to do all of the stuff I do now without the Alpine School. I'm heaps more independent and I can make friends easier and stuff. (PR, F, 9).

These comments indicated that these participants perceived they had been encouraged to examine and build upon their strengths, an important part of PYD (Eccles & Gootman, 2002). Certain aspects of the pedagogy of the SSL certainly provided for PYD. The SSL emphasised personal development and leadership growth, and gave its students every opportunity to grow in these areas. Participants had with many opportunities within the program to practise teamwork and leadership skills, such as being a student leader and co-ordinating groups on trips and excursions (SSL, 2010-2012). Every day, different students were given the opportunity to manage the day as a student leader. This involved conducting announcements for the group throughout the day, organising headcounts, attending a meeting in the morning and liaising with the student leaders from the other campuses via video conferencing (SSL, 2010-2012). The confidence gained by one female participant was evident in the following comment:

When I was at home there were times when I wasn't confident, I'd be really shy, but now I know I can be confident and it's up to me to take that step. Like I spoke in front of everyone when I was student leader and made them all listen (C2, F, 9).

The participants perceived that the school operated within a safe and inclusive environment, all part of catering to the needs of adolescents (Bahr & Pendergast, 2007). Students were encouraged to succeed and all attempts were made to ensure they had a positive sense of self-esteem and self-efficacy. This was evidenced and supported through a number of classes offered in the SSL curriculum, including Peer Skills, Leadership, Beliefs and Values and the Thinking and Learning classes. All of these classes, which are generally not offered in mainstream schooling, focussed on the diversity of individuals and use of character strengths (SSL, 2010-2012, 2014). In addition, students were recognised for their successes formally a number of times throughout the day during announcements:

I was really proud when I was named as a Student of Success for making it through Expo (MK, F, 5).

It was perceived that the atmosphere at the school was a lot less judgemental than what they experienced at their home school, and they felt that they could more easily step out of their comfort zone, as indicated by this representative comment from one of the female students:

If I can't do something really well, it doesn't really matter what other people think about me, just what I think like with dancing and that (C3, F, 9).

Some of the perception of such an inclusive environment was possibly a result of separation from technology, and particularly lack of engagement with social media, which often forms a large part of adolescents' free time. Students at the SSL did not have access to phones nor social media and had fairly restricted internet access, in terms of both times available to access and sites available to browse. There was no YouTube, no Facebook, no Instagram, no Snapchat. Without these platforms, there may not have been the incessant need to search for 'likes' and comments, which could lead to feelings of constantly being judged. A male student spoke of his changing perceptions of technology after the program:

I think the way I look at the modern day world has definitely changed in the way of social media and media in general. I've sort of decided to see it in a different view here, not as important (MG, M 5).

A female student spoke positively of being able to establish friendships at the SSL without the issues of technology, home and peer group issues:

Not having as much technology and not having all the problems of home and friend problems, and all that stuff. It's easier for meeting new friends that you're going to be friends with for a long time (S4, F, 5).

In addition to the lack of technology, aspects of the program promoted a supportive environment for development. These included operating in small groups, recognition of success, and a number of challenges, both cognitive and physical, presented to the students. From the first day, the program was promoted to the students as a once in a lifetime opportunity and they were encouraged to make the most of the experience. Staff often spoke to the students about the benefits of stepping out of their comfort zone, and feedback was given after every activity, which encouraged students to set positive goals. The students who attended the SSL were chosen by their home school for their potential for leadership. They were generally highly motivated students with aspirations of leadership, and had often been through an extensive selection process in order to be selected to attend. Therefore, due to their nature, the students tended to embrace all opportunities presented at the SSL Consequently, the interview data contained almost no negative comments or critiques of the SSL experience. Occasionally there were students who found the experience challenging, particularly in the initial stages, often due to homesickness. The following students acknowledged this:

It was hard at the start. I didn't really like my room mate to begin with, we didn't have much to talk about, and I missed my friends and my phone. (O2, F, 5).

I was really homesick at the start, especially the first week when we didn't have laptops. I guess I just wasn't used to doing stuff by myself. (NT, M, 5).

However, by the end of the program, none of the students interviewed were still feeling homesick or uncomfortable in their surrounds. These students were speaking about their initial weeks in the program, but both ultimately had a positive experience. The female student who commented about homesickness above, spoke about a turning point after Expo where she was able to overcome her homesickness and appreciate the experience:

After Expo I realised that I could do all the stuff on my own and I kind of forgot about missing everyone at home and just concentrated on stuff here (O2, F, 5).

The staff at the SSL were well versed in dealing with the feelings of homesickness and unease that some students experienced, and had been able to help students overcome these initial feelings.

Many of the classes at the SSL, particularly the Thinking and Learning classes, focussed on cognitive competence, a construct needed for PYD according to Shek et al. (2013). These classes were centred around critical and creative thinking, as well as allowing for some understanding of metacognition to develop. They introduced students to various learning styles and techniques and highlighted diversity in thinking and learning. Developments from these classes were evident in comments from the students such as the following:

I think I know heaps more about how everyone in my Year learns and how we are all different. I reckon I know how I can make sure I do well at school and know how to relate to my teachers and stuff. (M3, F, 9).

The program offered by the SSL enabled emotional competence to be developed, both in a formalised manner, with classes such as Peer Skills and Conflict Resolution, and also in a more informal manner with the day to day necessity of community living and coping away from the security and familiarity of parental guidance and the family home. There were regular provisions made for the participants to discuss their emotions, a necessity for emotional competence to develop in adolescents. Positive bonding experiences, as created in the SSL program with peers and adults other than their parents, allowed for the development of a positive culture and thus the thriving that is aimed for in PYD (Lerner, 2004). There were times when participants spoke of not getting along with others in the

program, but they also spoke of being able to resolve these issues, as demonstrated by one of the male students:

I had a hard time getting to know my room mate at first. We didn't really have much in common and he was pretty quiet. But after we did a couple of things like bike rides together we kind of started to get along better. (NT, M, 5).

Another female student spoke about issues with some of the girls, but once again, seemed to be able to manage to rectify the situation and maintain friendships:

We kind of went through a time just after Expo when all the girls had some problems. I think it kind of started with a rumour. But we had a few meetings with just the girls and 'Miss X' also helped and we were able to work it out. After that I think we all became even closer. (NH, F, 9).

Although these comments show that there were occasionally issues with friendships and bonds with peers, students were given the tools to work on improving these relationships and strengthening their bonds and hence connection. Often issues that arose within the community would be dealt with by holding a group meeting, facilitated by a staff member. During these meetings students would be given the opportunity to speak about any issues and agreements to resolve issues were usually enabled.

From the significant impact of the program on Character, as noted in the quantitative data in Figure 4.5 and the qualitative data in Tables 5.3 and 5.5, it was apparent that participants reported a greater sense of self-understanding and knowledge of what was important to them and a greater understanding of their beliefs and values. The following comment by a female student reflected this:

I know who I am a bit more. I hadn't really thought about what I've placed values with before the placing value class, and I know I think it's much easier to know what I want to get out of life. Who I am, what's important to me (DT, F, 5).

This type of self-understanding was focussed on explicitly in the school's program through classes such as Beliefs and Values and Goal Setting, as well as implicitly, with students being required to live independently, work in teams and take on a number of responsibilities (SSL, 2010-2012, 2014). The physical isolation of the campuses of the SSL may have also contributed to students having the time to consider and reflect on their values and goals, rather than being constantly bombarded with technology and social media. Undertaking thirty minutes of silent reflection in DEARR (Drop Everything and Reflect and Read) every day (SSL, 2014) was also an important aspect of the program and steered

participants towards greater self-awareness. In addition, feedback and reflection was an integral part of the SSL program, with students being asked to reflect at the conclusion of most activities (SSL, 2010-2014). This emphasis on reflection enabled students to note progress they were making and feel positive about this. One male participant noted his use of DEARR:

DEARR's actually pretty good. I like it. It's a good time for me to sit down and when I'm chilling out when I'm finished and just reflecting on my day and realising that I actually learnt this and I can look back in 5-10 years and think that's right and remember (DC, M, 5).

In undertaking goal setting and being asked to constantly reflect and look forward, students were, in effect, developing their sense of hope and future planning. Studies have shown that there is a high level of correlation between hopeful future expectations and PYD (Callina et al., 2014). There is also a link between hope and academic success and thriving in adolescence (Callina et al., 2014). Eccles and Gootman (2002) noted that it is important that adolescents are provided with opportunities for career and future planning.

The following reflection of a female participant indicated the ability to recognise the value of the experience in terms of future skills, and hence displays a great sense of positive hope:

Doing this has been the most constructive thing I've done in my schooling - like towards the future and building my leadership skills and my teamwork skills it's been the best thing that I've ever done (M1, F, 9).

Students were able to recognise skills they had developed and spoke positively about their progress as illustrated in these comments made by two female students:

I think confidence, and I've learned how to use my leadership skills, like how to work as a group too (KT, F, 5).

I feel like I have changed, like my confidence in myself, so I'm really looking forward to going back and continuing it back at school and seeing if anyone... yeah, I guess I'm really proud to be going back and showing people what I've learned. (EP, F, 5).

Adolescents have a need to feel safe, belong, connect and have opportunities to build skills (Eccles & Gootman, 2002). The SSL program and pedagogy ensured that these adolescent needs were met. The smaller group sizes allowed for individual needs to be met. Each group of up to six students had one liaison teacher and often classes were undertaken with just these students and their teacher (SSL, 2010-2012). More commonly classes were

conducted with two combined school groups (twelve students) and one staff member (SSL, 2014), which is still a much smaller student/teacher ratio than would be experienced in most mainstream school classes. The multi-day trips, known as Expos, were undertaken with twelve students and two staff, which allowed for ample contact with staff, in addition to ensuring that safety requirements were met (SSL, 2014). Participants were part of a close community and were given the direction and opportunity to participate in a range of activities which built skills, all in a supportive environment.

By setting challenges throughout the program which were achievable, participants gained a sense of accomplishment and confidence. These participants noted that they were able to aim high and achieve their goals:

I've learned that you can do anything that you wanted to, I've learned what I'm capable of doing (C3, F, 9).

I have found out how to do my very best (DL, F, 9).

All of this contributed to the positive development of youth – catering for the specific needs of adolescents by building upon their strengths, rather than trying to fix issues and problems. The pedagogy of the SSL had many different layers, including the curriculum, the setting, the daily routine and the messages provided to the participants. It was the combined aspects of this pedagogy that enabled a perceived growth in the Five Cs to occur within the setting of the SSL. The current study has demonstrated that the SSL effectively contributes to PYD.

Contribution and the CLP. Lerner et al. (2011) developed the sixth C of PYD, Contribution, as an effect of the positive development of the other Five Cs from youth programs. This construct of Contribution refers to contribution to self, others and the community, and it leads to success for society in general, as research has shown that youth who contribute go on to thrive and contribute to society as adults (Lerner, 2004; Hershberg, 2014). It follows that participants in the SSL program who have developed in all of the Five Cs could make a Contribution to society in the future. This view of increasing social capital (Calvert et al, 2013) is not only beneficial to the individual participants in a program, but to society overall. The beginnings of Contribution could be seen from the results and feelings of positivity towards the participants' Community Learning Projects (CLPs). This is demonstrated by the following comment by a student who recognised her contribution to community as a result of the SSL program:

Definitely being here has like if we hadn't been here we wouldn't be making a difference within our community so it's really good (NJ, F, 5).

It appears to be important for adolescents to feel a connection (Hershberg, 2014; Bahr & Pendergast, 2007) and projects such as the CLP, particularly if successfully completed, assisted in establishing feelings of Connection and hence Contribution.

Not only did the program at the SSL appear to have a perceived positive impact upon its participants, it could be perceived as positive for society, in terms of the future contribution these participants may make to their communities. There is, however, a need for a more consistent approach to monitor the CLPs once the program has finished. Although 90% of interviewed students were very optimistic and confident about completing their CLP projects when interviewed at the end of the program, only half these students had completed their projects one year post program. Two students commented on problems completing their CLP as follows:

I don't think the school really supported it, like when you're there you think it's going to be so amazing, we worked so hard on it, but you get back to school and the school doesn't want to give you much resources, any money and time (M2, F, 9)

We didn't get our CLP done, we didn't have time and the teachers didn't really respond to it or push it. We couldn't do it without their support (HM, F, 9).

Whether this failure to complete the CLP led to some negative feelings and lack of Connection and Contribution is beyond the scope of this study, however, further research would provide valuable feedback to the SSL program and other similar youth community engagement programs and projects.

The Five Cs – Not all equal

The current study used a measure of PYD developed by Lerner et al. (2005) which examined the five concepts of Character, Competence, Confidence, Connection and Care. Whilst it was shown by both the qualitative and quantitative findings that the program had a positive impact on all of the Five Cs and hence PYD overall, there were some discrepancies between the levels of perceived impact on each of these constructs, as referred to in Tables 4.7 and 5.3. Geldhof et al. (2011, 2014a, 2014b) noted that a bifactor analysis was a more powerful form of analysis, rather than just examining a higher order construct of PYD. Conway et al. (2015), in their Irish research, also found some anomalies between the Five Cs, in particular when it came to gender differences. The following discussion examines the

different constructs of the Five Cs and outlines potential reasons for the different perceived impact on the participants.

The Five Cs – not all equal - Competence and Confidence. When triangulated, the qualitative and quantitative data demonstrated that Competence and Confidence were perceived to have been positively impacted upon both at the end of the program and one year post program. As illustrated in Table 4.7, Confidence had an effect size of .43 and Competence .34 when comparing scores at the beginning and end of the program. Similarly, Confidence had an effect size of .37 and Competence .40 when comparing scores at the beginning and one year post program. All of these were moderate effect sizes (Burns, 2000). As illustrated in Table 5.3, 75% of interviewees mentioned Confidence and 65% Competence at the end of program interviews. One year post program, 66% mentioned Confidence and 30% Competence (refer to Table 5.6), although they spoke predominately about academic and leadership competence, rather than social competence as they had at the end of the program. Participants felt that the program had given them skills to recognise and develop their strengths as well as the competence to work better in teams, be better leaders and better public speakers. Some examples of comments about Confidence and Competence follow:

I've been gaining new life skills. Having new friends and just being able to have a once in a lifetime experience. My independence has grown well. You know because you have to do stuff by yourself. That would be it. (DL, F, 9).

I've also learnt about the changes in myself - I've become more confident and therefore have become less vague in my appearance. I'm more open to opportunities and willing to accept myself. I've become more organised which is really great because I've been working on that for what feels like a lifetime, And I've just become, uum, this whole experience has changed my whole being and I'm also sure it's changed everyone else's lives here. I've become a better leader, better person, better role model. And even though it's weird to say, the skills I've learnt here and the values I've adopted have given me a more positive and more exciting outlook on life and I'm really grateful for the knowledge and experiences the SSL has given me (CC, F, 5).

Confidence building and gaining competence in a range of skills was a key aspect of the SSL program (SSL, 2010-2012). Students were encouraged to become independent learners and the focus was often on providing students with opportunities for leadership. This was evident in daily tasks in the program such as student leader, duties and taking on a

variety of roles on Expo (SSL, 2010-2012). There was a key focus on goal setting and students undertook classes to set goals, learn to speak in public, explore leadership concepts and work in teams (SSL, 2014). The curriculum and environment of the SSL enabled the development of confidence and growth of new skills. There was a promotion of success, with students who have made some form of achievement recognised on a daily basis in the community forum (SSL, 2010-2012).

It was notable that physical competence was only mentioned once in any of the interviews, including the one year post program interviews, despite outdoor activities being such a large component of the program. This one comment pertained to gaining and maintaining strength through the program. The lack of comments about physical competence could be due to the manner in which the physical components of the program were conducted. For example, on Expo the ability to walk long distances, handle hills and carry a pack were seen as secondary compared to the achievement of setting goals, reading maps, organising packing, staying together as a team and looking after the welfare of both yourself and your peers. During and after Expo, a great deal of both oral and written feedback was provided to the students, but with a focus on leadership and teamwork competencies rather than the ability to physically complete the task. This is possibly why leadership and social competencies accounted for 29% and 27% of the references to Competence at the end of program interviews.

Both Competence and Confidence were key areas which were perceived to have been developed by the SSL program, and these skills were predominately retained even some time after program completion (refer to Tables 4.7 and 5.6). This was not as true for the other Five Cs concepts.

The Five Cs – not all equal - Connection. Data showed that Connection was also a concept that was perceived to have developed positively, although, it was not as strong in the quantitative data, particularly at the end of program, as illustrated in Table 4.7. It had an effect size of .36, which is moderate when the beginning and end of the program were compared. However, there was no statistically significant difference for Connection one year post program compared to the start of the program (refer to Figure 4.6). As shown in Table 5.3, Connection was only mentioned by one third of the participants in the end of program interviews, although this jumped significantly in the one year post program interviews with almost all of the participants mentioning Connection (refer to Table 5.6). Possible reasons for this increase are discussed later in this chapter.

Recent research by Hershberg et al. (2014) highlighted the value of Connection, suggesting it is the most meaningful of the Five Cs throughout adolescence for youth themselves. Their research examined some quantitative data from Lerner et al.'s 4-H study (2005). It found that the youth interviewed consistently over time talked about the importance of feeling connected to peers, family, school and other adults. It has long been recognised that a feeling of belonging and connection is a very important need of an adolescent (Bahr & Pendergast, 2007; Prosser, 2008). The program at the SSL aimed to create connections with peers and staff by promoting a strong sense of belonging and community within the school (SSL, 2010-2012). It was interesting then to note that it was not seen as the main impact of the program from the viewpoint of the participants, despite it being considered so important to adolescent thriving and PYD (Hershberg et al., 2014).

The Five Cs – not all equal - Care and Character. Care and Character were the least robust of the constructs which were perceived to have developed through the SSL program, as illustrated by the data analysis from both the qualitative and quantitative data. Care had only a small effect size of .10 between the start and end of the program and no statistically significant difference one year post program when compared to the beginning or end of the program (refer to Table 4.7). Character, likewise, had a small effect size of .15 between the start and end of the program and no statistically significant difference one year post program (refer to Table 4.7). Only 33% of participants mentioned Care in the end of program interview, and 55% mentioned Character (refer to Table 5.3). This decreased markedly for both of them one year post program, with fewer than ten percent of interviewees mentioning either in these interviews (refer to Table 5.6).

Brookes (2003) noted that character cannot be easily changed by a single program. Moreover, it may be asking too much to assume that a single five or nine-week program can fundamentally change a person's beliefs and values. It is important to be aware, however, that adolescence is such a crucial time of life when one's ideology is being constantly assessed and the adolescent is attempting to 'find themselves' (Bahr & Pendergast, 2007; Bahr, 2010). The SSL program certainly attempted to look at the concepts that are relevant to the construct of Character, in classes such as Beliefs and Values, and in many of the reflection sessions which took place daily (SSL, 2014). Students were asked to examine their actions and behaviour and why they acted in certain ways. By removing some of the influences which surround these students in their normal home lives, such as social media and mobile phones, students may have begun to develop their own world views. However, it

appeared that the program length was possibly too short or the curriculum not focussed enough to develop Character in any meaningfully positive way. Likewise, Care is a construct which is developed over a long period of time and is a concept which would be difficult to change in a short period. Nevertheless, there were many attempts in the program, such as through Peer Skills classes, to make students aware of the need to care for others and to develop a stronger sense of empathy for their peers (SSL, 2014). This is a difficult task for adolescents who are often self-involved (Carr-Gregg & Robinson, 2017; Hershberg, 2014) and unable to value other viewpoints.

The Five Cs – not all equal - Summary. The data demonstrated that there were perceived positive changes in all of the Five Cs at both the end of the program and one year post program, however, as the above discussion illustrated, there were discrepancies between the level of perceived impact on each of the Five Cs. Confidence and Competence were shown to have the strongest perceived development, with Character, Care and Connection displaying lesser perceived development. This is important for the SSL to acknowledge. The fact that perceived development of all the Five Cs was not equal means that the program was perceived to be stronger and more effective in some areas than others for these students. Whether these are areas which should be given more importance is for the school and its stakeholders to determine. Should it be decided that development in relation to all constructs should be equal or more emphasis needs to be placed on certain areas, then the program would need to be adjusted accordingly.

Discussion of Research Question 1b.

In what ways do students at the SSL perceive their development in relation to the Five Cs model of PYD, namely Character, Competence, Connection, Confidence and Care, one year after completion of the SSL program?

The current study involved a level of longitudinal research as it surveyed and interviewed the participants one year post program, in addition to at the end of the program, in order to determine the longer term perceived developments. Zink and Dyson (2008) conducted research which followed some students who had attended the SSL 6-8 years post their attendance. These students reported that the program had taught them a great deal about leadership, but it was difficult to establish if their successes were largely due to the SSL program, or other extraneous factors.

Generally, outdoor education research has found that positive outcomes from programs remain from months to years post program participation (Christie et al., 2014;

Goldenberg et al., 2010; Neill, 2008a, Robinson, 2013). Neill (2008a) found that six months post program involvement, up to 80% of short term benefits were retained by the participants in one of the young adult programs. Overall, he found long term change (six months post program) was found to be positive but deteriorated from the immediate impact post program. This is a feature that appears congruous with this study to some extent.

Although the program had a perceived positive impact on its participants, the strength of this impact was shown to deteriorate over time, rather than continue post program (refer to Tables 4.7 and 5.6). The quantitative findings showed that PYD, Competence and Confidence were the only constructs to have had a statistically significant impact between the start of the program and one year post program. Indeed, with the exception of Character and Competence, none of the other Five Cs nor PYD continued to improve between the end of the program and one year post program. There also was not a notable difference in the interviews between the end of program interviews and one year post program interviews. Comparing the data in Table 5.3 to 5.6, it can be seen that participants spoke more often of Confidence, Competence and Character at the end of the program, and more about Competence, Confidence and Connection one year post program. Perhaps the most noticeable difference was the increase in mentions of Connection one year post program.

Some of this may be explained with the concept of post group euphoria (PGE) (Leather, 2013; Neill, 2006). This is the incidence of participants being on a 'high' at the completion of the program. At the SSL, students left with a feeling of accomplishment and success. They were together with all other 44 students who had a collective memory of fun and enjoyment from the program. Then reality hit, and once home, routine returned. Participants no longer had a range of new experiences presented to them daily, and they were back to their home schools, families and friends. Whilst participants often attempted to continue to use lessons learned in the program, there was little follow up from the SSL. The only follow-up the students received post program from the school was a student report, a letter from their liaison teacher and one from themselves, delivered three months post program and a phone call two weeks post program. There was little follow up of their CLP projects or other progress.

When the beginning and one year post program quantitative data were compared, there was no statistically significant impact of the program on Connection. Interestingly though, it was the one construct which was shown to have a statistically significant

difference between the end of the program and one year post program, with a small negative effect size of .19. This meant that the decrease in the score for the construct of Connection was statistically significant between the end of the program and one year post program. None of the other constructs had a statistically significant difference between the end of the program and one year post program from the survey data, although PYD and the constructs of Confidence and Care all decreased in this period also.

The qualitative data for Connection, on the other hand, told a different story. Only 33% of participants spoke of Connection at the end of program, but this increased to 94% of participants one year post program. It was possible that the participants did not speak so much about Connection at the end of the program, as they were still 'living the program'. They possibly had not realised the community they had developed and the relationships they had formed were so important, as they had taken them for granted. Possibly participants felt a greater sense of connection with community and the other participants once removed from the situation, rather than just a sense of normalcy when being in the insular environment within the community. It is often not until something is removed that we feel its absence and a greater sense of connection. One year post participation, the participants were all keen to recognise the Connection with the SSL, particularly their peers. A representative comment from a female student noted the feeling of connection with peers she experienced one year post program:

I missed talking to all the other people when I got home. I'd think of something I wanted to tell my roomie, then realise she wasn't there. So I talk to them all the time on the phone. I think I'm better friends with the people from there than I am at home (HM, F, 9).

A possible reason for the discrepancy between the qualitative and quantitative data in the case of Connection could be the focus of Connection. Of the eight questions about Connection in the survey, only two referred to peer connections. The other questions referred to school, family and community connections. Reintegration back into mainstream school and everyday life proved difficult for some participants. Hence even a disconnection with school and community could have been experienced. A representative comment about of the difficulties of reintegration from a female student was as follows:

It was kind of hard just going straight back with my old friends and teachers, like, no one understood what I'd been through and that I'd changed (M5, F, 5).

The Connection most spoken about in the one year post program interviews was the Connection with peers. If anything, when Connections with family, school and community

were spoken of, they were somewhat negative, such as a frustration with trying to complete the CLP.

The significant negative trend for Connection in the quantitative data from the end of program to one year post program was concerning. When reasons for this negative trend were explored in the interview data, it was shown that the lack of school support and small success rates of CLP completion may have impacted on these results. In a recent Scottish study, Christie et al., (2014) suggested that there needed to be more of a link to the home school academic curriculum and outdoor education programs offered to the students. McNatty (2016) made similar findings in her New Zealand study. Likewise, Zink and Dyson (2008) also noted this in their research about the SSL. It would appear that these links are necessary at the SSL for Connection to continue to improve post program participation.

The SSL program promoted a sense of connection to community, both within the school and in a broader sense. The CLP attempted to connect participants to their home school and neighbourhood community. The communal living set up of the school fed a sense of connection to the school, staff and other students. Lessons of how to relate to these communities formed part of the curriculum with activities such as Peer Skills and Conflict Resolution (SSL, 2014).

Following participation in the SSL program the only real connection to the school was usually the friendships formed and completion of the CLP project. The follow up of the project varied greatly between home schools, depending on motivation and time allowances for staff and students involved. In no time students were back to their regular lives, with little connection to the SSL remaining. Although the program successfully built a sense of Connection at program completion, the challenge for the SSL is to continue this Connection post program.

The program offered at the SSL was perceived to have made an immediate impact on PYD for participants in the short term. It took students away from the routine of their home school and offered them a new and engaging program, specifically catering to their adolescent needs. In many respects, it was like a ‘sabbatical’ or ‘long service leave’, a concept the Principal Mark Reeves often refers to when explaining the program. One student expressed the differences between her mainstream school and the SSL in the following comment:

Absolutely, I've learnt so much here. I kind of know it's a bit..I don't know if it's rude to say it, but at school I wouldn't have learnt this much in this time period. Like I learned a lot of different things that I wouldn't have learned in school. (CC, F, 5).

The SSL does not offer mainstream subject based curriculum such as maths, English and science. It is not tied down by as many of the curriculum requirements as mainstream schools, but rather can choose ways of engaging students which fit within its mission. That being said, the SSL does report according to the Victorian Curriculum, but it does not have to cover all areas, as required by mainstream Victorian schools as it is only providing a term of Year 9. Nevertheless, some of the lessons taught and the environment provided at the SSL could be adapted and presented in mainstream schools in order to engage students in different ways.

Although Competence was a construct where there was continued growth one year post program, when the perceptions of areas of competence were further investigated in the interviews, there were notable differences in the competencies which were mentioned. At the end of the program, as depicted in Table 5.4, leadership and social competence were both mentioned frequently, and accounted for 29% and 27% of the references respectively. Academic competence and public speaking competence each accounted for about one fifth of the references to Competence. Physical competence only had one reference. However, at the one year post program interviews, as depicted in Table 5.7, leadership competence accounted for one half of the references to Competence. Academic competence grew to 36% of the references, but social competence and public speaking confidence dropped significantly to 6% and 8% respectively. Physical competence did not even get a mention. The decline in public speaking and social competence may have been due to the lack of opportunities on return home to speak in public or experience new social settings. This is an area which could be addressed by home schools being encouraged to continue to present students with these opportunities. It was important to note that leadership competence, one of the main foci of the SSL, did rise fairly significantly one year post program. It was, however, difficult to attribute this growth solely to the SSL program. The students who attended the program were chosen for the leadership potential, and hence, may have continued to foster this area of growth with or without participation in the SSL program. Zink and Dyson (2008) found likewise in their longitudinal research centred around the SSL.

The lack of a significant impact on Care, Connection and Character one year post program when compared to the start of the program, and the dearth of references to perceived development of Character and Care in the one year post program interviews, highlighted that these were areas where changes in participants' perceptions were not maintained over time. However, student perceptions in relation to Confidence, Competence and PYD one year post program were statistically different, meaning they were maintained. It is the challenge to continue to monitor and improve reintegration in order for the impact of the program to remain consistent after the program, and result in true PYD, not just a short term impact. If there is going to be a lasting impact of the program on all areas of the Five Cs, then there is a greater need for a reintegration program, whether it be in the curriculum at the home school, or a follow up program delivered by the SSL. However, as with all things in education, a number of fiscal and logistical restraints exist which may make this difficult. The way that development opportunities for the factors that underpin the constructs of Care, Connection and Character are presented in the program should also be examined, to see if they can be presented as life-long learning concepts. There is also a possibility that Character and Care are constructs that take a longer period of time to develop. There is certainly scope for further, more extensive longitudinal research into the participants' development of the Five Cs not just one year post program, but a number of years after participation.

Discussion of Research Questions 2a and 2b

2a. How do perceptions of development of the Five Cs differ between those participating in the five-week program compared to the nine-week program directly after their participation in the SSL program?

2b. How do perceptions of development of the Five Cs differ between those participating in the five-week program compared to the nine-week program one year after completion of the SSL program?

Research into outdoor education programs has demonstrated that program length is often a factor which can impact upon the effectiveness of a program (Neill, 2008a, Hattie et al., 1997). However, most of this research occurred with programs of much shorter lengths than the SSL's program and also involved non-school based programs. Gray (1997), McDonough (2002) and Laughton (2012) researched the impact of longer programs (one year and term programs) but did not research any other optimal program length. There is a

dearth of research about the optimal length of a residential program, and indeed about programs longer than two weeks.

One of the research questions arising from this study was the effect of program length, namely comparing a five-week and a nine-week program. Conducting programs of both lengths during the period of the current study provided an ideal opportunity to compare these two different program lengths. From an analysis of both the qualitative and the quantitative data, it was demonstrated that there was no discernible difference to the impact of the five and the nine-week programs on the Five Cs or PYD. None of the survey data showed any statistically significant differences relating to program length, with both programs having had a perceived positive impact on PYD in an almost equal amount. The interview data reflected very similar comparisons between the nine-week and five-week participants.

From these results alone, one may have concluded that the SSL should run five-week programs, thus enabling access to a greater number of students state-wide. However, there were also a number of other factors which needed to be taken into account.

Only data from the student participants were included in this study. Staff, parents and home schools were not involved in this research, and these stakeholders are all vital to the program. It is possible that the workload of staff may be greater with five-week programs, which could result in greater staff turnover and less effective teaching. Without effective teachers, it is unlikely the program would be a success.

Students also raised a number of issues regarding the five-week program, whereby they felt that the program was too rushed and they were pressed for time to complete everything. There is also the risk that continuous five-week programs may become more like a ‘camp’, rather than a school, something which the SSL has worked hard at over the years to avoid. Some of the comments about the longer program being preferable included mentioning the program being too rushed in five weeks:

I feel like all our work has been a bit rushed. Like I feel like it's all a bit stuffed into a five-week program when you usually have nine weeks to do it - and it doesn't work as well as it would if you still had nine weeks. I know they cut the program and stuff but it still feels really rushed and stressful. Like especially in the last week, we had NAPLAN and you're still trying to do Passport, your POL. and your CLP, then NAPLAN and try and have quality time with my roomie because it's your last week, so it's really stressful trying to balance out the time (DJ, F, 5).

Nine weeks seems like ages to start off with and it would go slow, but it's gone incredibly fast, I think five weeks would be crazy (C2, F, 9).

It'll be good to have a longer time gap between the Expos, because Expo one I was really freaked out about because I've never done this before. And then even though that sort of moment I wasn't prepared for a three-day hike which seems like oh god, what am I doing, so yeah. The extra 4 weeks would sort of put a bigger time gap which means you can sort of prepare yourself more, like not really physically sort of, but more mentally and emotionally. And it'll be good to know everyone here all a lot better, and we've sort of on time crunch because like we have such a short amount of time here and so many people to know. And the passports too, the passports um in five weeks, it's kind of um, pressure, it sort of puts me under a bit of pressure. (KB, F, 5).

Students were also concerned that the five-week program did not allow enough time to form bonds as demonstrated in the following comment:

I think having the four nine-week programs would be better, cause we just start to get to know all these kids by the five week mark, then we are leaving them, and it is harder for us to leave them at the five week, but if it was the nine week mark we would have got to know them, been friends with them and have those experiences with them, all our ups and downs, we would have left knowing we would definitely see you guys soon, knowing we had just come that much closer, but right now, we'll kind of leave and we've just got sort of comfortable (B4, F, 5).

However, there was also a perception from some students that five weeks was still long enough for them to gain a great deal from the program:

I think yeah, like obviously, if we had an extra four weeks - that's an extra month, that we could learn a bit more, but I think it's only a bit more. They've done it really well and they've condensed the whole program into five weeks and I think that even if we were on the nine-week program or if someone else was, we'd have still acquired the same knowledge. (CC, F, 5).

Indeed, many students thought that signing up for a nine-week program was not an option for them in the first place, as they would miss too much at home:

That's what a lot of my friends who came here, they were like I don't want to go to a nine-week program, but my friend said he would go to a five-week program, there was a lot more interest (HM, F, 9).

It could be ascertained from the previous comments that even though the data demonstrated that there was little difference in perceptions of development of PYD between the five- and nine-week programs, there were distinct preferences for program length, with advantages and disadvantages for each program length discussed. A greater insight into some of these perceptions, and the perceptions of not just the student participants but staff, parents/guardians and home schools would be necessary before any possible change were to be made to the program length.

A number of students reported a feeling of being 'cheated' by attending only a five-week program, when they initially had signed up for a nine-week program:

We were meant to have nine weeks, but because of the fires and that we just had five. I guess it was good we could go at all, but I was pretty upset at first and felt a bit ripped off (CS, F, 5).

The knowledge that other students were able to participate in a longer program possibly influenced some of the comments and bias towards the nine-week program. It was also a case of the nine-week program being the 'norm' and the five-week the exception, whereby people are always more comfortable with the norm and resistant to change (Pendergast & Main, 2011; Watson, 1971). Indeed Watson (1971), examining reasons for change resistance, stated that "any estimate of resistance which considers only the persons primarily and centrally concerned will be inadequate, the repercussions elsewhere may be even more influential in the survival of the innovation" (p. 759).

Whilst there are still many discussions needed and much scope for more research, this research alone does provide the impetus to begin examining the possibility of a shorter program and a greater number of student participants. However, this must be done thoroughly and with all stakeholders involved if any change is to be successful. It would also be important to conduct further longitudinal research to assess the long term impacts of participation in the five and nine-week program further down the track, such as at the conclusion of the participants' secondary schooling.

Discussion of Research Questions 3a and 3b

3a. How do perceptions of development of the Five Cs differ between female and male participants directly after their participation in the SSL program?

3b. How do perceptions of development of the Five Cs differ between female and male participants one year after completion of the SSL program?

The data demonstrated a number of differences in perceived program impact for male and female participants, particularly in relation to Confidence, Competence and Character. All of these gender differences had a small effect size in the quantitative data at the end of program of .23, .17 and .18 respectively, as shown in Tables 4.21, 4.22 and 4.24. There was no statistically significant difference between the genders at the end of program for PYD, Care and Connection, as shown in Tables 4.20, 4.23 and 4.25. The interview data showed that, with the exception of Character, the females spoke more about all of the Five Cs (refer to Figure 5.10). There were some differences in the content of the interviews and the type of references to the Five Cs between the female and male participants which warranted further discussion.

The female participants began the program with notably lower Confidence and Competence scores than the male participants (refer to Tables 4.21 and 4.22). This can be typical of outdoor education programs (Neill, 2007). At the end of the program, the females had significantly increased in both these items. Indeed, the males plateaued or did not increase nearly as much. Research has shown that female adolescents often have lower self-esteem and confidence than male adolescents (Biddulph, 1997; Gentile et al., 2009; Kling, Hyde, Showers & Buswell, 1999; Mills et al., 2007). It was therefore apparent that they were able to build upon these concepts more than the male participants, who began with a higher rating. It is often the case in outdoor education that males will be over confident or rate their skills more highly than their actual competency (Overholt & Ewert, 2014). Therefore, possibly the males were shown, through participation in the program, their actual level of Confidence and Competence. There were, however, no comments in the interviews to provide more insight into this concept. Gray (1997) also questioned the gender stereotype of females beginning with lower scores, when she found consistently higher scores for the female participants in the Timbertop program in her study.

In the interview data, over 80% of the girls mentioned a growth in Confidence, and only 40% of the males (refer to Figure 5.10). When the interview data were explored, it was noticeable that there were distinct differences in the types of Competence and Confidence to which the participants referred. The females spoke more regularly of social competence and the confidence they had gained from building relationships with peers and teachers. A representative comment from a female student displayed the perceptions of social competence spoken about by the female participants:

I can make friends easier now. I feel like I can approach people and don't always need to just sit with my friendship group (NA, F, 5).

The males, on the other hand, spoke more of academic competence, as is evident in the following representative comment made by a male student:

I reckon I will be able to learn better at school now I know I'm a green learner[2]*. I'll be able to ask the teachers to give me more written explanations. I reckon I'll do heaps better at things like English when I get back* (LL, M, 5).

The male participants mentioned Character more than the females, but their mention of Character largely referred to a growth in maturity. In the survey data, the females' initial Character score, unlike the Competence and Confidence, was higher than the males' scores. This correlates with research which shows females develop maturity and can regulate their emotions at a much earlier age than males (Gentile et al., 2009; Perry & Pauletti, 2011).

Interestingly there was little difference in the results of the genders one year post program. There were no statistically significant differences for the program one year post program by gender. The comments were also very similar. However, there were only 14 interviews analysed, which was a small number to quantify the interview data.

Conway et al. (2015) in their use of the PYD survey in Ireland, noted a difference in the results for the genders, particularly in relation to Confidence. They questioned the potential for gender bias in the survey – an area that needs more research.

This research into the SSL examined outcomes for the different genders. However, like much research (Mills et al., 2007; Biddulph, 1997; Lahelma, 2014), it has not examined the difference in program presentation or content for male and female students, but just looked at outcomes. Further research into the accountability for these differences in gender outcomes is recommended.

Justifying the Methods and Methodology

As outlined in Chapter Three, this study was developed from a constructivist paradigm (Lincoln & Guba, 2000; Grix, 2002; Piaget, 1954; Bahr & Pendergast, 2007), whereby participants all had different views of reality, as shown in Figure 3.1. This paradigm was appropriate for this study as the research questions were not looking for causal links, but called for a greater explanation of the data (Bahr & Pendergast, 2007). The research questions examined perceptions of the participants of the program with regard to

[2] 'Green learner' refers to a type of learner from Herrmann's HBDI Scale (Herrmann, 1996).

PYD. The use of a case study approach was chosen as it allowed an in-depth analysis of the program at the SSL and its impact on participants with relation to PYD (Cohen et al., 2013; Yin, 2014). This approach was also utilised as it catered for more of an insider's perspective. As a teacher at the SSL during part of the time that this research was conducted, it was important that this was acknowledged and provided for in the choice of research design.

Mixed methods involved using both qualitative and quantitative data to answer the research questions (Lincoln & Guba, 2000; Johnson & Onwuegbuzie, 2004). This provided robust yet meaningful findings about the development of PYD and the program at the SSL, as well as examining the differences between the five and nine-week programs. In using both the survey and interview data, differences in the Five Cs and their impact were shown in greater detail, than had just one method been implemented. The rich data provided by the interviews gave a greater understanding to the survey data. The qualitative data from the interviews allowed student voice to be heard throughout the study. This was an important aspect of this study, as the student voice allowed for deeper insights from the findings. For instance, as previously discussed in this chapter, the survey data demonstrated that there was no statistically significant difference for ratings for Connection one year post program compared to at the beginning of the program. This data alone would give the SSL an indication that this area needs to be improved in the program if it is to improve one year post program. The interview data provided an insight into why Connection may not improve one year post program. Participants in the interviews one year post program reported difficulties completing their CLPs and a lack of support in this process, hence a disconnection from the program and their school, but a stronger connection with their peers from the program.

Another example where the use of a mixed methods design value added to this study was that of preferred program length. When the survey data were examined there was no discernible nor statistically significant difference in the development of PYD and the Five Cs for participants in the five-week and the nine-week programs. However, once student voice was considered, it was ascertained that there was a range of thoughts about the different length programs which must be taken into consideration before any recommendations to change the program length were to be made.

It can be seen from the above examples that the use of mixed methods in this current study was justified as it provided richer answers to the research questions, by drawing from both empirical data and student voice. It was due to this in depth discussion that conclusions and recommendations could be drawn.

Summary of Discussion

This chapter presented a discussion of the findings of this research which examined the perceptions of participants in the SSL program regarding PYD as measured through the Five Cs model. Further discussions about program length, longer term effects of the program and differences for male and female participants were also outlined. From this discussion, a list of recommendations emerged and are presented in the following chapter. Furthermore, Chapter Eight contains an explanation of the limitations of this study and suggests scope for further research into alternative residential settings and PYD, in addition to the SSL program specifically.

Chapter Eight: Recommendations and Conclusions

I reckon it taught me like so much and that I will have created and taken more opportunities for myself in my life and hopefully that will lead to something bigger (CC, F, 5).

This chapter draws on the research findings and discussions presented in the previous chapters to answer the overarching research question about the perceived impact of positive youth development (PYD) on participants in alternative residential education programs. In addition, from this study, and the research questions, a set of recommendations emerged and a list of five general recommendations is provided. Furthermore, limitations of the research are discussed and scope for future research is suggested. The significance of this study, both with respect to the findings for the SSL and for other educational programs is outlined.

Overarching Research Question

How does participation in an alternative residential education program impact on positive youth development in adolescents?

It can be surmised from the findings and the discussion that, simply put, participation in an alternative residential education program, such as the SSL, is perceived from the participants' viewpoint, as a positive experience that impacts on development. This is the bottom line of this research. However, there are some caveats on this, which were discussed when the findings and the sub research questions were examined in Chapters 6 and 7.

The main research question was examined using a case study approach, investigating the SSL program. Although not all alternative residential programs are identical, as dictated by case study design, results from the data could be extrapolated and applied to other educational settings both nationally and internationally (Yin, 2014). Overall, at the end of this program all the data determined that the students had perceived their development as positive, when measured using the Five Cs measure of PYD (Lerner et al., 2005). However, the impact of the program was not felt as strongly, nor did all changes in perceptions maintain growth in all areas of the Five Cs between the end of the program and one year post program. There was a need for greater follow up of the program in order for the benefits of the program to continue and for positive gains to be maintained. There was also greater perceived progress in some constructs of the Five Cs than others, namely Competence and Confidence, which developed to a far greater extent than Care, Connection and Character. There were differences in the

perceptions of the program for male and female participants, which suggested the necessity for further research into the efficacy of the program according to gender.

From the analysis and discussion of the data findings, a set of recommendations emerged as follows:

Recommendations

RECOMMENDATION 1: The SSL program has a perceived positive impact on PYD for its participants. The program should continue to be run for students in Year 9. In addition, delivery of aspects of the program into mainstream schools and other educational settings should be investigated.

RECOMMENDATION 2: The SSL program does not have as much of an impact on Character, Connection and Care as it does on Confidence and Competence. The SSL's program should be examined and researched to strengthen its focus on these areas.

RECOMMENDATION 3: The reintegration program for students and follow up of students should be more formalised to ensure gains in PYD made during the program are long term, and a sense of Connection is maintained.

RECOMMENDATION 4: The SSL program should be run as a five-week program, in order to ensure more students have access to the experience. This recommendation is made with a caveat, that this research only measured student outcomes, not outcomes for other participants, such as staff, parents and home schools. This should be explored before any change is made. In addition, the five-week program should not just be a condensed version of the nine-week program.

RECOMMENDATION 5: The SSL should examine how Confidence, Competence and Character are presented in the curriculum with respect to catering for both genders, and if there is any need to cater differently for males and females.

Recommendation 1

The SSL program has a positive impact on PYD for its participants. The program should continue to be run for students in Year 9. In addition, delivery of aspects of the program into mainstream schools and other educational settings should be investigated.

It has been demonstrated in this mixed methods study that the SSL program has a perceived positive impact on PYD and all of the Five Cs (Competence, Confidence, Character, Connection and Care) for the participants. Students spoke positively of perceived

gains made in the program and all areas had a statistically significant increase between the beginning and the end of the program.

PYD has been shown to increase Contribution and an individual's worth to society (Lerner et al., 2005). From this, it was determined that the SSL program is indeed a worthwhile program for both individuals and society. The program was perceived to have given participants an increased sense of self-worth and understanding. As such, it is recommended that programs such as the SSL continue to be undertaken in order to cater for the positive development of adolescents.

In addition, it is recommended that aspects of the SSL program could be used in other settings, such as mainstream schools and other alternative settings. The program at the SSL has been successful in engaging Year 9 students and has been perceived to develop PYD positively. Whilst some of the program would be difficult to duplicate in mainstream schools, there are parts of the program which could be delivered in a mainstream setting. For example, a selection of the classes, such as Thinking and Learning and Beliefs and Values, which students mentioned in the interviews, would be suitable for delivery in most schools, either as stand-alone classes or as part of the general curriculum. Similarly, the emphasis on feedback, reflection and recognition of student successes could be incorporated into the curriculum in all educational settings in order to develop PYD.

The setting of the SSL program was also perceived by the participants to be a safe and inclusive environment. This environment emanated from a program which was largely delivered via small groups, recognised student achievements and successes and involved a great deal of reflection. There was also no social media nor other outside pressures from home and friendship groups. This environment would be very difficult to duplicate in a mainstream setting, where students only attend during school hours, and have readily available access to social media, and also have a range of other commitments in their homes, workplaces and communities. However, there are aspects, such as continuous recognition of student successes and providing more opportunities for personal reflection, which could be included in a mainstream middle school setting, which would offer an ideal environment for adolescents to achieve to their potential.

Recommendation 2

The SSL program does not have as much of an impact on Character, Connection and Care as it does on Confidence and Competence. The SSL's program should be examined and researched to strengthen its focus on these areas.

Although the SSL program impacted positively on all areas of the Five Cs, it was determined that not all constructs were developed equally, and more attention should be given to the development of Care, Connection and Character through the SSL's curriculum and program. This current research examined the perceptions of the participants regarding the Five Cs, but it was outside the scope of this study to examine the curriculum and program in detail in order to determine where in the program the Five Cs were delivered. This is an area which has potential for further research and development.

Recommendation 3

The reintegration program for students and follow up of students should be more formalised to ensure gains in PYD made during the program are long term, and a sense of Connection is maintained.

The program had some impact one year post program on participants, particularly in the areas of Confidence, Competence and Character. However, Care and Connection were not as strong one year post program participation. If indeed, one of the goals of youth development programs is maintaining PYD and hence Contribution, then there are aspects of the SSL program that need to be examined. Participants often felt disconnected from not just the program, but their home lives on return to their home schools. Further attention and time paid to reintegration of the participants to their home lives is warranted. This could be undertaken either by the SSL staff or home school staff. If this were to happen, this area of the program would require significantly more resources than are currently available to both the SSL and the participants' home schools.

Recommendation 4

The SSL program should be run as a five-week program, in order to ensure more students have access to the experience. This recommendation is made with a caveat, that this research only measured student outcomes, not outcomes for other participants, such as staff, parents and home schools. This should be explored before any change is made. In addition, the five-week program should not just be a condensed version of the nine-week program.

Overall there were few notable differences in the data between the five and nine-week participants. Although some participants claimed to prefer the nine-week program, there were others who favoured the shorter program. From the results of this current study, there is an impetus to provide shorter programs, which would enable more students to attend the SSL. The nine-week program has been providing positive outcomes since 2000, so some

would argue why change what's not broken? However, as with all things, innovation is important as times are always changing. There will always be change resisters, but adaptability is important for all educational institutions to move into lifelong learning for the 21st century (Pendergast & Main, 2011). However, providing shorter programs would be a fundamental change for the SSL and there is a recommendation that further research into the perceptions of the other stakeholders such as staff and home schools should be undertaken before a change were to be made. There would also need to be a greater planning of the five-week program, as many of the participants in the five-week programs in this study felt that it was too compressed and rushed. Rather than the five-week program being a condensed version of the nine-week program, it would be important that it was a well-designed, stand-alone program in order to deliver optimal outcomes.

Recommendation 5

The SSL should examine how Confidence, Competence and Character are presented in the program with respect to catering for both genders, and if there is any need to cater differently for males and females.

There were some differences in the findings between male and female participants. These differences were particularly evident in the areas of Confidence, Competence and Character. It appeared that females increased their Competence and Confidence much more than males, whereas males perceived more gains in maturity. Female participants also spoke of building more relationship skills. There are differences between the genders that are particularly noticeable in adolescence, as the adolescent strives to form their identity (Davison & Frank, 2006; Perry & Pauletti, 2011). These differences would account for some of the discrepancies in perceptions of the participants regarding the Five Cs. It is important that these gender differences are acknowledged and catered for in the curriculum. This would involve more research into the way the curriculum at the SSL is perceived by the different genders.

Limitations of the Study

Although every effort was made with this study to ensure that the research was rigorous and defendable, there were a number of limitations which must be acknowledged.

Challenges of adolescent research participants. Participants in this research were all Year 9 students, aged between 14 and 16 years old. There are many challenges for a researcher working with adolescent participants (Bassett et al., 2008). These can include

adolescents feeling vulnerable (Bassett et al., 2008), adolescents providing untrustworthy answers (Way, 2005) and feeling pressured to provide certain answers.

The students at the SSL were selected for their potential for leadership (SSL 2010a) and therefore most of them were quite articulate and were able to verbalise their thoughts and ideas. It was also part of the program delivery that the participants were taught to be confident with their ideas and handle situations like interviews with maturity and confidence. One student explained it as follows:

I think it would be about speaking up, voicing my opinions and offering them to people. Because I used to be really scared that people would judge me, so I think I've gotten quite confident with just speaking out and doing that and all (E2, M, 9).

The majority of participants who were interviewed provided valuable and insightful information. Both parental and participant consent was given for all interviews and participants were aware that the interviews were being recorded digitally. Although in some research this seems to be off-putting for adolescents and results in short answers, or even the 'adolescent grunt' (Bassett, 2008), it was not the case in the interviews for this research. Whether then the participants in this study are truly representative of all Year 9 students or are the 'elite' provides scope for further research.

There was also the challenge that adolescents change and develop so quickly that repeated measures longitudinal research can be difficult, as attitudes, values and even understanding of the participants can change more rapidly than in the adult population (Glück & Indurkhya, 2001). It was therefore vital that a large enough sample was taken to ensure valid and reliable, robust results. However, this is a factor that, without a control group, was difficult to assess.

Lack of a control group. Experimental research design is most robust when a control group is utilised (Babbie, 2001). This allows for the impact of the program to be studied without the influence of extraneous factors. A control group for a study such as this would have consisted of participants from the same schools as this study's participants, with similar backgrounds, socio-economic status and academic achievements. Due to time limitations and ethical restraints this was not possible for this study.

There were 387 participants surveyed and 58 interviews took place at the end of the program. These involved students from diverse cohorts, gender representation and two campuses. Although extraneous factors, particularly those affecting the participants one year post program must be acknowledged and cannot be completely ruled out as influences due

to the lack of a control group, the findings of this research have a large enough sample to be considered significant. The use of a constructivist paradigm and the chosen case study research design also alleviated the need for experimental research with a control group.

Program fidelity. The curriculum, whilst broadly the same, did vary between campuses and indeed between teachers and school cohorts. The experience of the program was slightly different for every participant depending on which campus and which term they attended, which cohort of students participated and who their staff were. Follow up and support post program also varied greatly between participants. Any of these factors may have influenced the impact of involvement in the program for participants and should be recognised as a limitation of the study. There exists an opportunity for further research into the differences between the campuses, staff approaches and student cohorts and the effectiveness of the SSL.

Objectivity. It must be noted that I was a staff member at the SSL, Alpine Campus when I commenced this research, but not during the entire data collection period. As I wrote in the prologue, I have long been a supporter of the SSL program, but wanted to examine aspects of the program from a research perspective, including program length and the students' perceptions of the program. While conducting this the research, I made every effort to maintain an unbiased approach to the data, both in the collection and analysis process. I ensured participants were aware that their participation would be protected by confidentiality and would have no impact on their report or progress at the SSL. My position as curriculum coordinator ensured I was not directly involved in assessing these students. Every attempt was made to ensure the research was robust and unbiased. This included ensuring data collection was consistent throughout the process, working with a relatively large sample size, and the process of ensuring my supervisors were involved in peer reviewing the research.

No pilot study undertaken. Due to time constraints with commencement of the research process and the five-week programs beginning soon after, there was no possibility of a pilot study. Instead, I had to rely on the large 4-H study and other studies using the Five Cs PYD survey (Geldhof et al., 2014b). The instrument had not been tested in an Australian environment, only having been used in extracurricular programs in the United States. Geldhof et al. (2014b), the designer of the survey used, did question some aspects of the instrument. In particular, the limitation that the items in the survey come from multiple sources and use different metrics to score them. Geldhof et al. (2014b) called for further

research into the appropriateness of the scales, and suggested that a five point Likert Scale for all items may be easier, although this could also possibly compromise the integrity of the survey. Conway et al. (2015) also noted that there may be some gender bias associated with this survey, and suggested further research was necessary.

Participants managed the questions and survey layout very well. This was aided by myself being present (either in person or video link up) at the administration of the surveys. Participants were given a consistent and clear explanation of the survey and a demonstration of the first question. This allowed for any queries on the survey to be answered in a consistent and accurate manner. Participants handled the varying scales of the survey with no issue.

While the aim of this research was not to specifically validate the survey for an Australian population, the statistical analysis conducted on the survey did demonstrate that it was valid and reliable measure for this setting. The data analysis demonstrated internal validity of the survey when tested using Cronbach's alpha. Whilst ideally a pilot study may have fine-tuned some aspects of the survey, I am confident that the survey data were valid and reliable, given the range of results and the supporting research of the survey by Geldhof et al. (2014b).

Non representative sample. Home schools nominated students to attend the SSL who were student leaders, or demonstrated potential for leadership. As such, often the students who attended the SSL were high achieving students. Although not always the case, the students who attended the SSL program were highly motivated and had chosen of their own accord to attend the program. Rarely were they coerced into attending and did not want to be there. The students commenced the program already eager to benefit and generally with a high level of intrinsic motivation. As any mainstream government school teacher would tell you, this would not be a representative cohort of Year 9 students. Whether the SSL program would have the same perceived benefits for less motivated students was beyond the scope of this research. This limitation could potentially have effects if some of the SSL program were used in a setting with less motivated students.

Lack of negative comments. The interview data were overwhelmingly positive, with very minimal criticism or negative talk about the program. These data corresponded with anecdotal data and other research about the SSL (Dyson & Cairns, 2001, Dyson & Zink, 2007; Dyson & Zink, 2008; Dyson & Plunkett, 2010; Dyson & Plunkett, 2012), which have resulted in virtually no negative critiques of the SSL. Possibly, in the case of my

current research, given that I was an insider researcher and being a teacher at the SSL for the first year of data collection, student participants could have felt uncomfortable criticising the program. However, when I travelled to the SRC Campus, the students did not know me as a teacher. I was also on family leave during the second year of data collection, so the students would not have associated me readily with the teaching staff. In addition to this, participants were assured they could speak freely and anonymously with no repercussions for anything they said. Although possible that students were reluctant to criticise the program in the interviews, there would probably not have been that reluctance in the surveys. Given that the survey data demonstrated positive development at the end of the program, it was ascertained that the students were generally positive about the program. It was more likely that the students did have overwhelmingly positive experiences of the program, and had little upon which to comment negatively. The students generally self-selected to attend the SSL and were motivated to achieve their full potential during the program. The SSL program had a reputation of being a great experience, and participants commenced the program prepared for a positive experience. This may then have become a self fulfilling prophecy, whereby students expected a positive, worthwhile experience, and hence were less likely to be critical of the program.

Although there were a number of limitations in this study, overall, I am confident that none of them presented any major issues for the robustness of this research.

Scope for Further Research

The program at the SSL is relatively new and ever evolving and there is a need for research into many aspects of the program. Whilst this research examined program length and overall program impact using positive psychology, there is little research into the details of curriculum provided at the SSL. The different outcomes for the Five Cs demonstrated that the program has its own strengths and weaknesses, which future research could examine in more detail. There is also very little research into the impact of the program more than one year post program. Follow up of student participants a number of years post program participation would further enhance knowledge in this field.

Other areas which would lead to valuable research include looking at the impact and perceptions of the program for different students, for example, the difference for gender, background, socio-economic status or locality. This current study noted some difference in perceptions of the Five Cs by the different genders, but there has been no research into the curriculum components that create these differences, nor how to best cater for the different

needs of the two genders. The differences found for genders is definitely worth exploring in order to provide a more targeted program. There is a need to expand some of the stakeholders in the research to include home schools, staff, parents and peers of program participants. Research into any differences between campuses and program with different cohorts (for example, all rural programs) would also provide valuable insight into the SSL program.

In addition to further research into the SSL as outlined above, there is also scope for further research into PYD and alternative residential educational settings. Although the survey instrument used in this research has been used in a large scale study in the United States, and some smaller studies, there is still opportunity for broadening the use of this measure of PYD. There is scope for more international studies concerned with PYD and the measure of PYD in alternative settings. There exists limited research into residential educational programs, despite the increase in their development. Research into how best to adapt some of the successful components of the SSL program into mainstream schools and other settings would also benefit educational outcomes for adolescents. Continued research into best practice in this field is important if the middle school educational sector is to continue to improve.

Conclusion

This research has provided valuable and significant knowledge for the SSL and its future directions. It also has wider value in terms of looking at youth programs and alternative residential settings which could cater for PYD. In addition, there are aspects of the program, which have been shown to be successful and could be trialled in mainstream schools. The PYD movement is gaining increasing popularity amongst the research community, and the more varied programs to which the Five Cs model can be adapted and researched, the stronger the Five Cs model will become. To date there was little international research conducted using the PYD model of the Five Cs. The successful use of the model in this research in the Australian context could provide the guidance for other researchers to follow suit.

Furthermore, there are a wide range of programs for Year 9 students offered to encourage their personal development and growth. As the SSL program has proved to be a very effective means for this, it can act as an exemplar in this field. A number of recommendations regarding the future provision of the program at the SSL emerged from this current study. The current study, along with past research into the SSL and residential

school settings, provides encouragement for governments and education systems to develop similar ever-improving programs and residential settings which cater to the needs of adolescents.

There are still some challenges for the SSL to meet and with progress in education moving rapidly and new ideas constantly emerging, the SSL cannot afford to keep the status quo. Although evidence in this research points to the SSL successfully developing youth in their program, it is also evident from this research that not all of the Five Cs are equally developed in the SSL program and there are different outcomes for female and male participants. In addition, some impacts of the program seem to dissipate over time, as displayed in the longitudinal data. Our youth are our future. The more opportunities we can provide for them to develop, the more positive learning opportunities we can present to them, the more life skills we can gift them, the stronger our future will be.

SSL was definitely the highlight of my life so far. I will always take what I've learnt and make myself a better person. I'm sad to leave here, but I'm really excited about using everything I've learnt here and doing great things. (UC, F, 5)

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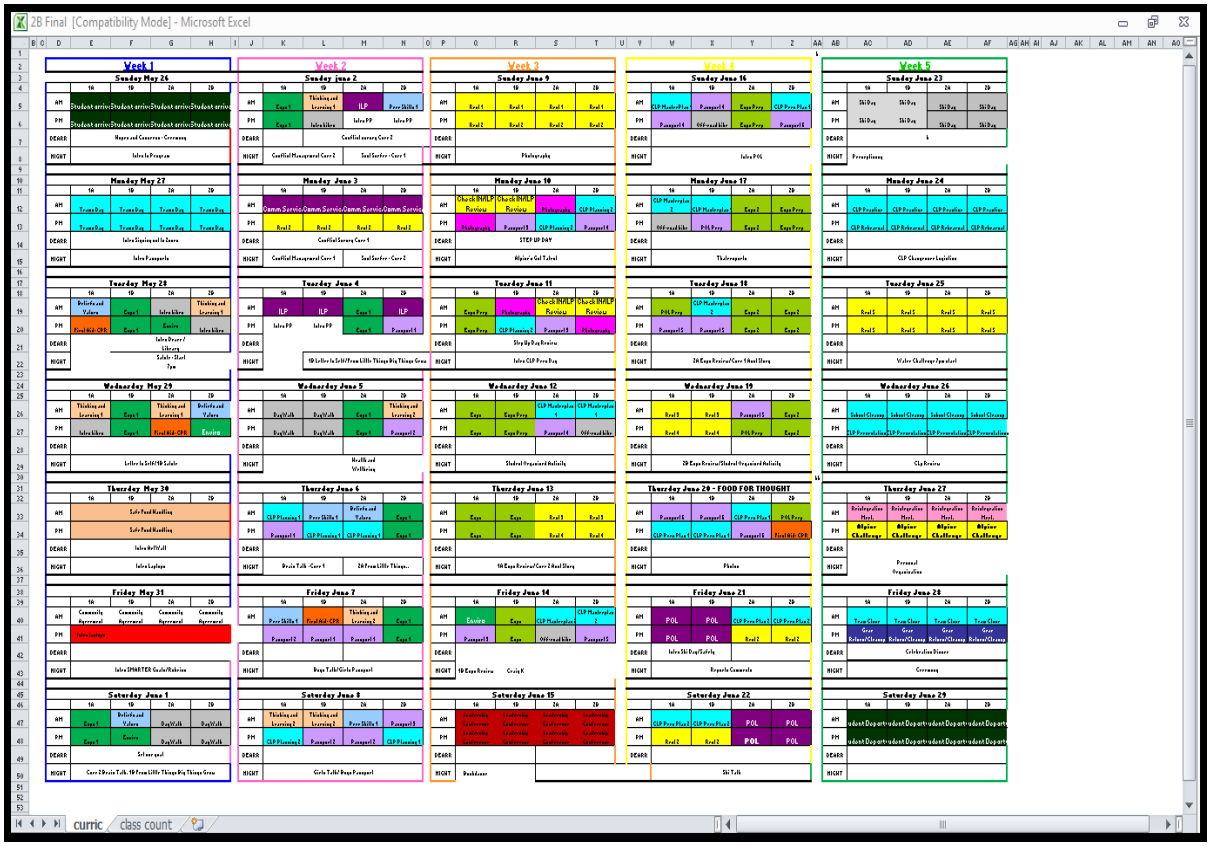
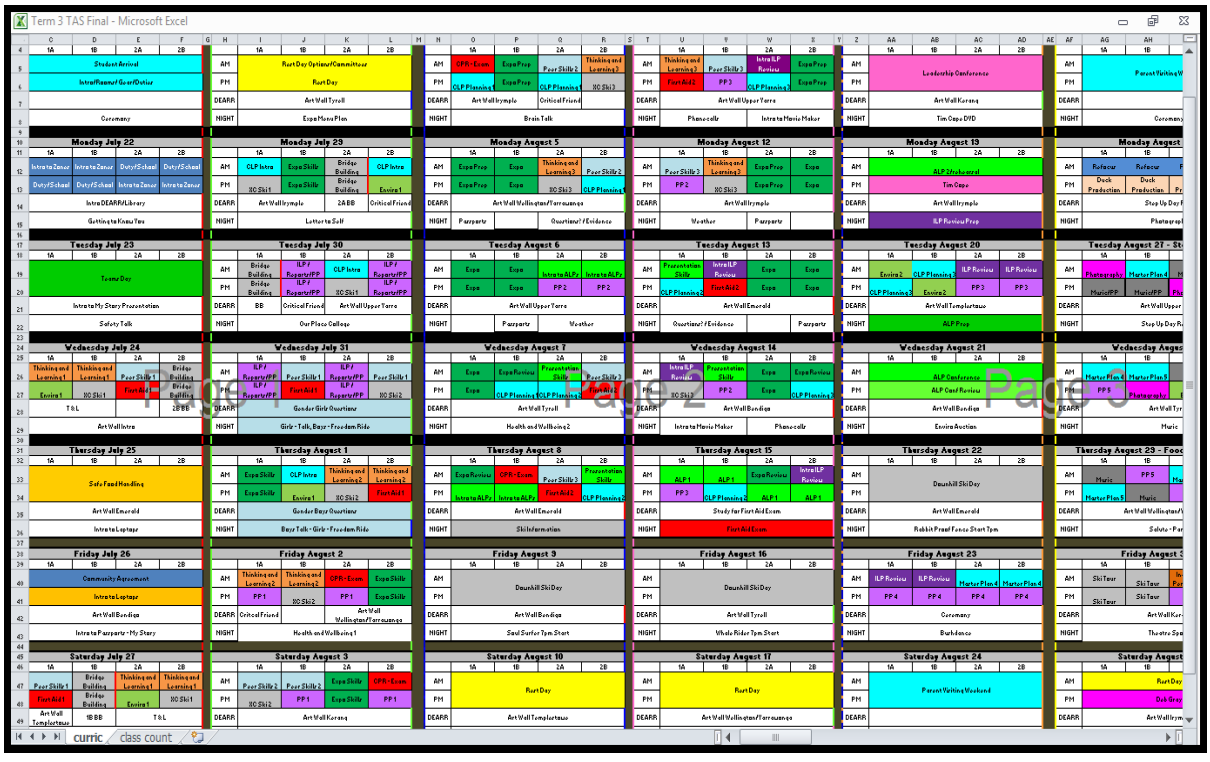
Appendix 1

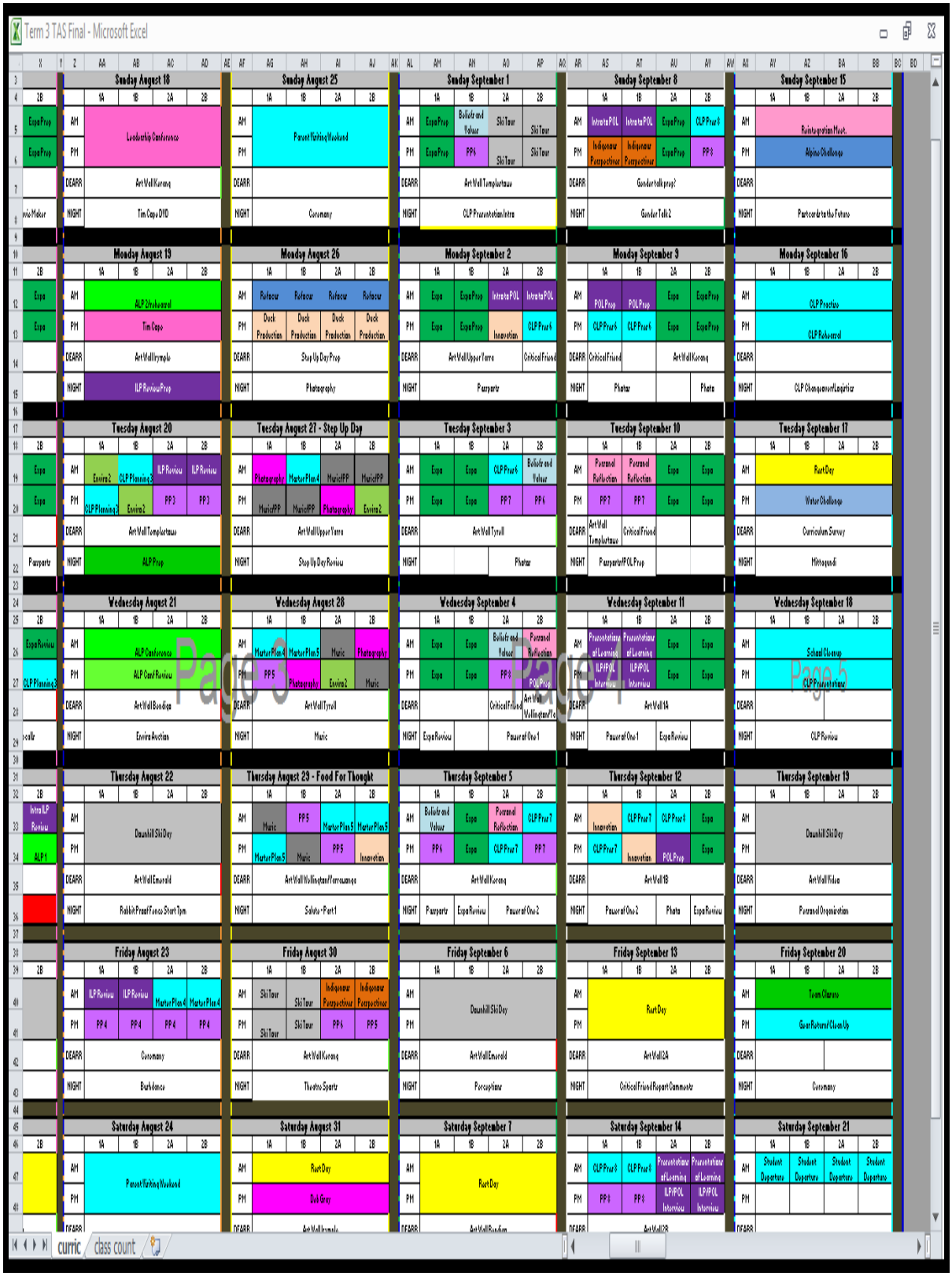
5 Week Program



9 Week Program Weeks 1-6



9 Week Program Weeks 6-9



Appendix 2

NAME: CAMPUS: TERM

The following pairs of sentences are talking about two kinds of teenagers. We would like you to decide whether you are more like the teenagers on the left side, or you are more like the teenagers on the right side. Then we would like you to decide whether that is only sort

FILL IN ONLY ONE CIRCLE FOR EACH PAIR OF SENTENCES.

SAMPLE:

Really True for Me	Sort of True for Me				Sort of True for Me	Really True for Me
O	O	Some kids would rather play outdoors in their spare time	BUT	Other kids would rather watch T.V.	O	O

Really True for Me 4	Sort of True for Me 3				Sort of True for Me 2	Really True for Me 1
O competence 1	O	Some teenagers feel that they are just as smart as others their age.	BUT	Other teenagers aren‘t so sure and wonder if they are as smart.	O	O
O competence 2	O	Some teenagers have a lot of friends.	BUT	Other teenagers don‘t have very many friends.	O	O
O competence 3	O	Some teenagers think they could do well at just about any new athletic activity.	BUT	Other teenagers are afraid they might not do well at a new athletic activity.	O	O
O competence 4	O	Some teenagers do very well at their class work.	**BUT**	Other teenagers don‘t do very well at their class work.	O	O
O competence 5	O	Some teenagers feel that they are better than others their age at sports.	**BUT**	Other teenagers don't feel they can play as well	O	O
O confidence 1	O	Some teenagers are happy with themselves most of the time.	**BUT**	Other teenagers are often not happy with themselves.	O	O

O competence 6	O	Some teenagers are popular with others their age.	**BUT**	Other teenagers are not very popular.	O	O
Confidence 2 O	O	Some teenagers think that they are good looking.	**BUT**	Other teenagers think that they are not very good looking.	O	O
O character 1 – REVERSE CODE	O	Some teenagers do things they know they shouldn‘t do.	**BUT**	Other teenagers hardly ever do things they know they shouldn‘t do.	O	O
O confidence 3	O	Some teenagers really like their looks.	**BUT**	Other teenagers wish they looked different.	O	O
O character 2	O	Some teenagers usually act the way they know they are supposed to.	**BUT**	Other teenagers often don‘t act the way they are supposed to.	O	O
O confidence 4	O	Some teenagers are very happy being the way they are.	**BUT**	Other teenagers wish they were different.	O	O

How much do you agree or disagree with the following?

	Strongly Agree 5	**Agree 4**	**Not Sure 3**	**Disagree 2**	**Strongly Disagree 1**
All in all, I am glad I am me.	Confidence 5 O	O	O	O	O
When I am an adult, I’m sure I will have a good life.	Confidence 6 O	O	O	O	O

How important is each of the following to you in your life?

	Not Important 1	Somewhat Important 2	Not Sure 3	Quite Important 4	Extremely Important 5
Helping to make the world a better place to live in.	Character 3 O	O	O	O	O
Giving time and money to make life	Character 4 O	O	O	O	O

better for other people.					
Doing what I believe is right even if my friends make fun of me.	Character 5 O	O	O	O	O
Accepting responsibility for my actions when I make a mistake or get in trouble.	Character 6 O	O	O	O	O

Think about the people who know you well. How do you think they would rate you on each of these?

	Not at all like me 1	A little like me 2	Somewhat like me 3	Quite like me 4	Very much like me 5
Knowing a lot about people of other races.	Character 7 O	O	O	O	O
Enjoying being with people who are of a different race than I am.	Character 8 O	O	O	O	O

How well does each of these statements describe you?

	Not well 1	2	3	4	Very Well 5
When I see someone being taken advantage of, I want to help them.	Care 1 O	O	O	O	O
It bothers me when bad things happen to any person.	Care 2 O	O	O	O	O
I feel sorry for other people who don‘t have what I have.	Care 3 O	O	O	O	O
When I see someone being picked on, I feel sorry for them.	Care 4 O	O	O	O	O
It makes me sad to see a person who doesn‘t have friends.	Care 5 O	O	O	O	O

When I see another person who is hurt or upset, I feel sorry for them.	Care 6 O	O	O	O	O

How much do you agree or disagree with the following?

	Strongly Agree 5	**Agree 4**	**Not Sure 3**	**Disagree 2**	**Strongly Disagree 1**
I get a lot of encouragement at my school.	Connection 1 O	O	O	O	O
Teachers at school push me to be the best I can be.	Connection 2 O	O	O	O	O
I have lots of good conversations with my parents	Connection 3 O	O	O	O	O
In my family I feel useful and important.	Connection 4 O	O	O	O	O
Adults in my town or city make me feel important	Connection 5 O	O	O	O	O
Adults in my town or city listen to what I have to say.	Connection 6 O	O	O	O	O

How true is each of these statements for you?

	Always true 5	**Usually true 4**	**Sometimes true 3**	**Seldom true 2**	**Almost never true or never true1**
I feel my friends are good friends	Connection 7 O	O	O	O	O
My friends care about me.	Connection 8 O	O	O	O	O

Thank you for taking the time to complete the survey.

Appendix 3

Interview questions:

(Note that this is a semi-structured interview, so discussion may deviate from the questions)

1) What has changed about you since you started the program?

2) How do you think you have developed your 'building social relationships'? (This is a term which the students are often introduced to during the program)

3) What have you learned about leadership and teamwork?

4) How did participating in the SSL help you develop connections with friends, family and the community?

5) What does living in community mean to you?

6) What skills and ideas will you take with you when you leave the SSL?

7) Do you think you will change at school, home, with your friends when you return?

8) How will you go with your CLP?

9) How did you find DEARR?

10) What has been the best thing here?

11) What has been the hardest thing here?

12) If you were the Principal and had to decide between running a five and a nine week program what would you do?

Note – similar questions will be asked after one year – (i.e. have you changed since attending the SSL?)

Appendix 4

Interview Participants Details

Code	Gender	Campus	Program Length	Locality	Interview Type
AK	Female	SRC	5 weeks	rural	individual
BA	Male	SRC	5 weeks	rural	individual
BP	Male	Alpine	5 weeks	rural	individual
BR	Male	Alpine	5 weeks	city	individual
CC	Female	SRC	5 weeks	rural	individual
CQ	Male	Alpine	5 weeks	rural	individual
CS	Female	Alpine	5 weeks	rural	individual
DC	Male	SRC	5 weeks	rural	individual
DJ	Female	SRC	5 weeks	rural	individual
DL	Female	SRC	9 weeks	city	individual
DM	Female	Alpine	5 weeks	rural	individual
DT	Female	Alpine	5 weeks	rural	individual
EC	Male	SRC	9 weeks	city	individual
EP	Female	Alpine	5 weeks	rural	individual
HC	Male	SRC	9 weeks	city	individual
HM	Female	SRC	9 weeks	rural	individual
IB	Female	Alpine	5 weeks	rural	individual
IC	Male	SRC	5 weeks	city	individual
IF	Male	SRC	9 weeks	rural	individual
JB	Female	SRC	5 weeks	rural	individual
KB	Female	Alpine	5 weeks	city	individual
KC	Male	SRC	5 weeks	city	individual
KD	Male	SRC	9 weeks	city	individual
KH	Male	SRC	9 weeks	city	individual
KJ	Male	SRC	9 weeks	city	individual
KK	Male	Alpine	5 weeks	rural	individual
KT	Female	Alpine	5 weeks	city	individual
LL	Male	Alpine	5 weeks	city	individual
MG	Male	Alpine	5 weeks	rural	individual
MK	Female	SRC	5 weeks	city	individual
MV	Male	SRC	5 weeks	rural	individual
NA	Female	SRC	5 weeks	rural	individual
NC	Male	SRC	5 weeks	rural	individual
NG	Male	SRC	5 weeks	rural	individual
NH	Female	SRC	9 weeks	city	individual

Code	Gender	Campus	Program Length	Locality	Interview Type
NJ	Female	SRC	5 weeks	rural	individual
NP	Female	SRC	9 weeks	rural	individual
NT	Male	SRC	5 weeks	rural	individual
NV	Female	Alpine	5 weeks	city	individual
OR	Female	Alpine	5 weeks	rural	individual
PR	Female	Alpine	9 weeks	city	individual
TD	Male	Alpine	5 weeks	rural	individual
UC	Female	SRC	5 weeks	rural	individual
UE	Male	Alpine	5 weeks	city	individual
UL	Male	Alpine	9 weeks	city	individual
UT	Male	Alpine	9 weeks	rural	individual
YS	Male	Alpine	5 weeks	rural	individual
B1, B2, B3	Male	Alpine	5 weeks	rural	group
B4, B5, B6	Female	Alpine	5 weeks	rural	group
C1, C2, C3	Female	Alpine	9 weeks	city	group
C4	Female	Alpine	9 weeks	city	group
E1, E2	Male	SRC	9 weeks	rural	group
E3, E4	Female	SRC	9 weeks	rural	group
L1, L2, L3	Male	SRC	5 weeks	rural	group
L4	Female	SRC	5 weeks	rural	group
M1, M2, M3	Female	SRC	9 weeks	city	group
M4, M5, M6	Female	SRC	5 weeks	city	group
N1, N2, N3	Male	Alpine	5 weeks	city	group
N4, N5, N6	Female	Alpine	5 weeks	city	group
O1, O2, O3	Female	Alpine	5 weeks	rural	group
R1, R2	Male	Alpine	5 weeks	rural	group
R3, R4, R5	Female	Alpine	5 weeks	rural	group
S1, S2	Male	Alpine	5 weeks	rural	group

Code	Gender	Campus	Program Length	Locality	Interview Type
S3, S4, S5	Female	Alpine	5 weeks	rural	group
W1, W2, W3	Male	SRC	5 weeks	rural	group
W4, W5, W6	Female	SRC	5 weeks	rural	group
SR1	Female	Alpine	9 weeks	rural	written
SR2	Female	SRC	9 weeks	city	written
SR3	Female	SRC	9 weeks	rural	written
SR4	Female	SRC	9 weeks	city	written
SR5	Female	Alpine	5 weeks	city	written
SR6	Female	Alpine	5 weeks	rural	written
SR7	Male	Alpine	5 weeks	rural	written
SR8	Female	Alpine	5 weeks	city	written
SR9	Female	Alpine	5 weeks	rural	written
SR10	Female	SRC	5 weeks	city	written
SR11	Male	Alpine	5 weeks	rural	written
SR12	Male	Alpine	5 weeks	rural	written
SR13	Male	Alpine	5 weeks	city	written
SR14	Female	Alpine	5 weeks	rural	written

Appendix 5

Time 1

Case Processing Summary

		N	%
Cases	Valid	341	87.9
	Excluded[a]	47	12.1
	Total	388	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.694	.692	5

Inter-Item Correlation Matrix

	confidence1	competence1	character1	caretotal1	connection1
confidence1	1.000	.619	.248	.064	.525
competence1	.619	1.000	.102	-.024	.437
character1	.248	.102	1.000	.524	.368
caretotal1	.064	-.024	.524	1.000	.238
connection1	.525	.437	.368	.238	1.000

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Inter-Item Correlations	.310	-.024	.619	.642	-25.973	.045	5

Time 2

Case Processing Summary

		N	%
Cases	Valid	342	88.1
	Excluded[a]	46	11.9
	Total	388	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.643	.658	5

Inter-Item Correlation Matrix

	confidence2	competence2	character2	caretotal2	connection2
confidence2	1.000	.552	.145	.135	.407
competence2	.552	1.000	.106	.126	.360
character2	.145	.106	1.000	.517	.206
caretotal2	.135	.126	.517	1.000	.226
connection2	.407	.360	.206	.226	1.000

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Inter-Item Correlations	.278	.106	.552	.446	5.205	.027	5

Time 3

Case Processing Summary

		N	%
Cases	Valid	150	38.7
	Excluded[a]	238	61.3
	Total	388	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.732	.738	5

Inter-Item Correlation Matrix

	confidence3	competence3	character3	caretotal3	connection3
confidence3	1.000	.565	.236	.230	.622
competence3	.565	1.000	.175	.201	.425
character3	.236	.175	1.000	.501	.355
caretotal3	.230	.201	.501	1.000	.289
connection3	.622	.425	.355	.289	1.000

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Inter-Item Correlations	.360	.175	.622	.447	3.559	.024	5

Appendix 6

Obliquely rotated component loadings for 34 survey items and communalities (h^2) N=342*

Time 1									
Component	1	2	3	4	5	6	7	8	h^2
Confidence 3	.832								.685
Confidence 4	.821								.711
Confidence 2	.733								.650
Confidence 1	.724								.698
Confidence 5	.693								.646
Confidence 6	.491								.403
Care 6		.842							.712
Care 4		.806							.710
Care 5		.791							.635
Care 3		.650							.518
Care 2		.650							.479
Care 1		.570							.462
Connection 5			-.816						.740
Connection 6			-.807						.707
Connection 4			-.689						.636
Connection 3			-.604						.444
Connection 1			-562						.545
Connection 2			-.488			.320			.490
Character 5				-.856					.676
Character 6				-.784					.661
Character 3				-.727					.649
Character 4				-.663					.650
Competence 4					.683				.596
Character 1					.627				.561
Character 2					.590				.465
Competence 1					.541				.437
Character 7						.805			.714
Character 8						.774			.696
Competence 3							.825		.671
Competence 5							.801		.686
Competence 6							.564		.600
Connection 7								.890	. 793
Connection 8								.884	.816
Competence 2							.420	.444	.586
Eigenvalues	8.485	4.666	1.990	1.727	1.585	1.300	1.224	1.147	
Percentage of total variance	24.24	13.33	5.69	4.94	4.52	3.71	3.50	3.28	
Number of test measures	6	6	6	4	4	2	3	3	

*Loadings =>.30

Obliquely rotated component loadings for 34 survey items and communalities (h^2) N=342*

Time 2

Component	1	2	3	4	5	6	7	8	9	h^2
Confidence 1	.815									.711
Confidence 3	.786									.643
Confidence 4	.770									.633
Confidence 5	.646									.653
Confidence 2	.681									.589
Confidence 6	.490									.458
Care 4		-.906								.767
Care 6		-.880								.770
Care 5		-.853								.694
Care 2		-.741								.608
Care 1		-.683								.590
Care 3		-.599								.529
Connection 4			.786							.701
Connection 5			.763							.712
Connection 3			.753							.604
Connection 6			.721							.751
Character 5				.806						.650
Character 6				.776						.643
Character 3				.769						.676
Character 4				.752						.695
Competence 4					-.788					.676
Character 2					-.654					.529
Character 1					-.623		-.331			.592
Competence 1					-.580		-.338			.553
Character 7						.852				.780
Character 8						.848				.779
Competence 5							.810			.667
Competence 3							.787			.707
Competence 6							.377			.554
Connection 7								.914		.795
Connection 8								.845		.792
Competence 2							.413	.423		.539
Connection 1									.784	.620
Connection 2									.690	.663
Eigenvalues	6.908	4.492	2.226	1.822	1.742	1.486	1.313	1.280	1.064	
Percentage of total variance	20.32	13.21	6.55	5.36	5.12	4.37	3.86	3.76	3.13	
Number of test Measures	6	6	4	4	4	2	3	3	2	

*Loadings =>.30

Obliquely rotated component loadings for 34 survey items and communalities (h^2) N=150*

Time 3										
Component	1	2	3	4	5	6	7	8	9	h^2
Confidence 3	.894									.816
Confidence 2	.822									.754
Care 4		.910								.834
Care 6		.897								.792
Care 5		.842								.727
Care 2		.760								.601
Care 3		.727								.640
Care 1		.618								.578
Character 4			-.849							.742
Character 3			-.841							.729
Character 1				.666						.610
Character 2				.641						.591
Character 6			-.449	.578						.727
Character 5			-.413	.483						.625
Competence 6				-.448		.348		.343		.672
Connection 6					-.834					.735
Connection 5					-.818					.765
Connection 4					-.542					.622
Connection 3					-.504					.625
Confidence 6					-.410					.567
Character 8		.316	-.344		.382		.335			.655
Competence 3						.852				.749
Competence 5						.840				.753
Competence 2						.413		.412		.680
Connection 1							.735			.811
Connection 2					-.362		.730			.685
Character 7					.366		.487	.301		.660
Connection 7								.870		.696
Connection 8								.792		.715
Confidence 4	.413							.426		.755
Confidence 5	.369							.381		.637
Confidence 1								.331		.597
Competence 1									-.880	.756
Competence 4									-.837	.774
Eigenvalues	8.365	4.031	2.302	2.102	1.739	1.530	1.330	1.161	1.113	
Percentage of total variance	24.60	11.86	6.77	6.18	5.11	4.50	3.91	3.41	3.27	
Number of test Measures	2	6	2	5	6	3	3	5	2	

*Loadings =>.30

Appendix 7

Shapiro-Wilk's test results

	Time	Statistic	df	Significance
Care	1	.92	382	.000
Care	2	.90	375	.000
Care	3	.92	164	.000
Competence	1	.97	368	.000
Competence	2	.98	370	.000
Competence	3	.96	162	.000
Confidence	1	.96	357	.000
Confidence	2	.95	366	.000
Confidence	3	.96	153	.000
Connection	1	.96	375	.000
Connection	2	.94	372	.000
Connection	3	.96	164	.000
Character	1	.97	371	.000
Character	2	.96	367	.000
Character	3	.96	158	.000
PYD	1	.99	353	.002
PYD	2	.97	348	.000
PYD	3	.98	152	.043

Appendix 8

Ethical Permissions

Final Project Report

Human Research Ethics Committee

Federation UNIVERSITY • AUSTRALIA

1) **Project Details:**

Project No:	**E14-032**	
Project Name:	**A comparative study of five week and nine week residential programs for Year Nine students.**	

2) **Principal Researcher Details:**

Full Name:	Assoc Prof Margaret Plunkett
School/Section:	Faculty of Education and Arts
Phone:	0351226980
Fax:	
Email:	Margaret.plunkett@federation.edu.au

3) **Project Status:**

Please indicate the current status of the project:	
☒ Data collection complete **Completion date: 30 06 / 2016**	☐ Abandoned **Please give reason:**

4) **Special Conditions:**

If this project was originally approved subject to special conditions, were these met?		
☒ N/A	☐ Yes	☐ No * **NB: If 'no', please provide an explanation:**

5) **Changes to project since original approval was granted:**

Have amendments been made to the originally approved project?	
☐ No	☒ Yes Was HREC Approval granted for these changes? ☒ Yes ☐ No: **Please provide details: Change of principal supervisor**

Final Project Report

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6) Storage of Data:

Please indicate where the data collected during the course of this project will be stored, then when and how it will be destroyed:
Hardcopy data is being stored in a locked filing cabinet in the office of principal supervisor while all online data is stored on password protected computers of the student researcher Susan Joyce. All of the data will be destroyed once the thesis examination is complete as this should coincide with the 5 year storage requirement. Hard copy data will be shredded and online data will be deleted.

7) Research Participants:

Were there any events that had an adverse effect on the research participants OR unforeseen events that might affect ethical acceptability of the project?	
☒ No	☐ Yes * **NB: Please provide details:**

8) Summary of Results:

8.1. Please provide a short summary of the results of the project (no attachments please):
The project found little discernible differences in outcomes relating to positive youth development as a result of participating in either a five or nine week program at the School for Student Leadership.

8.2. Were the aims of the project (as stated in the application for approval) achieved? Please provide details.
Yes the aims were to enable completion of a PhD project investigating differences in student outcomes following engagement in either a five week or nine week program at the School for Student Leadership. This project enabled the relevant data to be collected and analysed as the basis for a PhD study.

9) Feedback:

The HREC welcomes any feedback on: • **Difficulties experienced with carrying out the research project; or** • **Appropriate suggestions which might lead to improvements in ethical clearance and monitoring of research.**

Final Project Report

Human Research Ethics Committee

Federation UNIVERSITY • AUSTRALIA

10) Signature/s:

Principal Researcher:	Print name: Assoc Prof Margaret PLunkett	**Date:**	9/03/2018
Other/Student Researchers:	 Print name: Ms Susan Joyce	**Date:**	09/03/2018
	…… Print name:	**Date:**	

Please return to the Ethics Officer, Gippsland or Mt. Helen campus, as soon as possible.